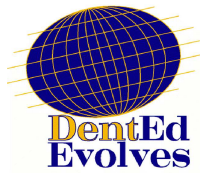


DentEdEvolves SITE VISIT



**JAGIELLONIAN UNIVERSITY
COLLEGIUM MEDICUM**

FACULTY OF MEDICINE

SUBFACULTY OF DENTISTRY

CRACOW

POLAND

21st - 25th October 2000

DetnEd Site Visit Sub-faculty Of Dentistry Cracow Contents

Section 1 –Introduction and General

Description.....	
1.1 Preliminary Information.....	
1.2 The Jagiellonian University of Cracow and Collegium Medicum.....	
1.3 The Faculty of Medicine and Subfaculty of Dentistry (Background).....	
1.4 List names of persons who act as visitors on site visits to other schools.....	
1.5. Basic data on students.....	
1.6 List of the Departments in the School and the total number of whole time equivalent clinical academic staff.....	
1.7 Number of auxiliaries trained each year.....	
1.8 Specialist and higher degree training courses.....	
1.9 Staff and Resources. Breakdown of staff numbers in Dental School/Hospital.....	
1.10 Staff and Resources. Total number of all staff employed in Dental School.....	
1.11 Staff and Resources. Annual total salary budget for all staff of institution in Euros.....	
1.12 Staff and Resources. Approximate ratio of full-time staff to part time staff in supervision of student's clinical training.....	
1.13 Staff and Resources. Average number of hours per week spent by full time senior clinical academic staff in treating patients.....	
1.14 Number of hours students spent in patient treatment (on average) per week.....	
1.15 Number of hours student spent in "simulated" patient treatment per week in manikin or phantom head laboratory.....	
1.16 Total number of patient visits to the Dental School/Hospital per year by Department or Clinic.....	
1.17 Visitors comments to Introduction and General Description.....	

Section 2 –Facilities.....

2.1 Clinical Facilities.....	
2.2 Teaching Facilities.....	
2.3 Teaching Laboratories.....	
2.4 Research Laboratories.....	
2.5 Library.....	
2.6 Visitors comments to Facilities.....	

Section 3 - Organisational and Administrative Structures.....

3.1 Organisational structure.....	
-----------------------------------	--

Section 4 – Staffing.....

4.1 Strengths and weaknesses of staffing levels and description of innovations in gaining maximum benefit from staff available.....	
4.2 List of academic staff.....	

Section 5 –17 The Dental Curriculum.....

Teaching and learning methods.....	
Students exchange.....	

Section 5 – The Biological Sciences.....

5.1 Biochemistry.....	
5.2. Genetics.....	
5.3. Biology and Embriology.....	
5.4 Biophysics.....	
5.5 Chemistry.....	

Section 6 –Pre-clinical Sciences.....

6.1 General anatomy.....	
6.2 Physiology.....	
6.3 Histology.....	

Section 7 – Para-clinical Sciences	
7.1 Pharmacology.....	
7.2 Microbiology.....	
7.3 General pathology.....	
7.4 Immunology.....	
Section 8 – Human Diseases	
8.1 General Medicine.....	
8.2 General Surgery.....	
8.3 Anaesthesiology.....	
8.4 Paediatrics.....	
8.5 Ophthalmology.....	
8.6 Laryngology.....	
8.7 Infectious diseases.....	
8.8 Dermatology.....	
8.9 Allergology.....	
8.10. Neurology.....	
8.10 Physiology of pregnancy and delivery.....	
8.11 Psychiatry.....	
8.12 General Surgery.....	
8.14 Forensic Medicine.....	
Section 9 – Orthodontics and Child Dental Health	
9.1 Orthodontics.....	
9.2 Child Dental Health (Paediatric Dentistry).....	
Section 10 – Public Dental Health	
Section 11 – Restorative Dentistry	
Section 12 – Periodontology	
Section 13 – Oral Surgery, Oral Radiology	
13.1 Oral Surgery.....	
13.2 Maxillofacial Surgery	
13.3 Radiography and Radiology	
Section 14 – Oral Medicine and Oral Pathology	
14.1 Oral Medicine.....	
14.2 Oral Pathology.....	
Section 15 –Integrated Patient Care and Dental Emergencies and Special Needs Patients	
15.1. Integrated patient care.....	
15.2 Dental emergencies.....	
15.3 Care of special needs patients.....	
Section 16 – Behavioural Sciences	
16.1 Behavioural Sciences.(Medical Psychology).....	
16.2 Communications.....	
16.3 Ethics & Jurisprudence.....	
16.4 Practice Management.....	
16.5 Medical Sociology.....	
16.6 Epidemiology.....	
16.7.Other.....	
-Informatics and Biometry	
Latin and Foreign Languages	
History of Medicine	
Section 17 – Examinations, Assessments and Competences	
Section 18 – Other Influences	
18.1 Regional oral health needs.....	

18.2 Evidence based treatments.....

18.3 Involvement in other university activities and sport.....

18.4 Recreation.....

18.5 Student selection procedures.....

18.6 Labour Market Perspectives.....

Section 19 – Student Affairs.....

19.1 Basic Data from Dental Schools

19.2 List different postgraduate courses

19.3 List different auxillary/technology/other courses and state number who qualify per year.....

19.4 Describe briefly student counseling services in the University.....

19.5 Visitors comments to student affairs.....

Section 20 –Research and Publications.....

Section 21 – Quality Development.....

General remarks

Quality development structures

Section 22 – Visitors Executive Summary on the School..... 84

Section 1 – Introduction and General Description

1.1. Preliminary Information

Name of School: **Jagiellonian University, Collegium Medicum, Faculty of Medicine, Subfaculty of Dentistry**

City: **Cracow**

Country: **Poland**

Full legal name: **Jagiellonian University, Collegium Medicum, Faculty of Medicine, Subfaculty of Dentistry**

Name of Person delegated to act as DENTED contact person:

Name: **Maria Chomyszyn – Gajewska**
Position: **Vice Dean for Subfaculty of Dentistry**
e-mail: mdgajews@cyf-kr.edu.pl

Date Visitation

Saturday 21st October to Wednesday 25th October 2000

Visitors

Antonio Carrassi (Chairman)	University of Milan
Peter Hull (Rapporteur)	University of Manchester
Patrick Ferrillo	University of Southern Illinois
Maria Wierzbicka	University of Warsaw
Vjekoslav Jerolimov	University of Zagreb

1.2. Jagiellonian University of Cracow and Collegium Medicum

Cracow has been for centuries a seat of Polish kings. Since the 14th century the city has been a university town. The Jagiellonian University was founded by King Casimir the Great in 1364 under the name *Alma Mater Cracoviensis* and had three faculties including the Faculty of Medicine, law and liberal arts. Medicine represented two professors, one of whom the *lector ordinarius in medicinis* was a full professor of medicine and the other, probably a professor of astronomy, lectured on astrology, which for a long time was associated with medicine. The lectures were held at the royal castle. Cracow, the town with its coat of arms (a wide open gate) has always been hospitable to visitors from the East, West, South and North. In the Middle Ages accessible to German immigrants, in the Renaissance it was open to Italians and their fresh intellectual ideas.

After renovation in 1400 under the patronage of Queen Jadwiga and her husband King Ladislaus Jagiełło (after whom the university was named) there were four faculties, including theology. At that time the Faculty of Medicine co-operated with about 50 renowned scholars. They also travelled abroad, especially to Padua.

There were also many of Polish famous names connected with medicine and dentistry among academics at the University.

After the second world war in 1945 the University immediately resumed its teaching activities and started to develop slowly (limited by lack of teaching staff and resources). The extreme enthusiasm of young people, their hard work and devotion in learning and revival of Polish science were soon suppressed ideologically and politically, attenuating the most valuable element and hindered the development of many fields of science such as genetics which were considered ideologically alien. All medical faculties from the universities in Poland were then separated into independent Academies of Medicine. In Cracow, as well as in other towns of Poland, the Academy comprised the Faculty of Medicine with the Division of Dentistry and the Faculty of Pharmacy and Nursing. In 1965 The Institute of Pediatrics (Polish-American Children's Hospital) was founded by the help of US Government and extended in 1984 by Out-Patient Departments supported by Project Hope.

The subsequent development in medicine and initiation of scientific contacts and collaboration with other research centers in Western countries concerned the Academy of Medicine as separated from its mother university, *Alma Mater Jagiellonica*. Strong efforts to reunite the Academy with the University succeeded May 12, 1993 in formal return of the Faculty of Medicine as well as Faculty of Pharmacy and Nursing to the Jagiellonian University. They formed together *Collegium Medicum* of the Jagiellonian University.

1.3. The Subfaculty of Dentistry – Background

The University was founded by King Casimir the Great in 1364.

The structure of the University kept changing over past centuries and Stomatology Department was not included in it at the beginning.

In 1512, a medical handbook with some advice about diseases of the mouth and teeth was written and the date marks the historical inclusion of dentistry in medical sciences in Cracow and Poland. However, it was not until 1779 that non-systematic teaching of dentistry was first mentioned.

On February 1, 1897, University Out-patient Department of Dentistry was established at the Department of Surgery of the Jagiellonian University. There is evidence to prove that Cracow was the first centre to introduce dentistry in the teaching of medicine in Poland. The out-patient department became the basis on which the Chair of Dentistry of the Jagiellonian University was founded in 1903. It was later transformed into the Institute of Dentistry, subsequently renamed Institute of Stomatology which continued until the outbreak of World War II in 1939. During the Nazi occupation (1939-1945) the Institute was closed down and the building housed a German military hospital.

The Institute resumed its activities on Feb. 1, 1945 and soon it was renamed Stomatological Clinic. Separate medical schools (medical academies) were established in 1950 and, at the same time, there emerged 4 basic specialist chairs: Conservative Dentistry, Dental Prosthetics, Orthodontics and Maxillofacial and Oral Surgery.

In 1993, Medical Academy again became part of the Jagiellonian University as Collegium Medicum. It now comprises 3 faculties: Medical, Pharmacy, Preventive Medicine with Nursing. Stomatology is a separate unit within the faculty of Medicine. At the moment it consists of the Chair and Department of Conservative Stomatology (with divisions of Periodontology, Pedodontics and Diseases of Oral Mucosa), Prosthetics, Orthodontics, Maxillofacial Surgery, Oral Surgery and Introduction to Conservative Stomatology. They were all situated at various locations in the centre of Cracow. This, however, was a temporary state of affairs since a new building is being prepared for Stomatology. It will house all the chairs and departments except for the Maxillofacial and Oral Surgery which will remain at the hospital as it needs the beds for patients. There will also be room in the building for the library, laboratory for technicians, central sterilizing room, lecture halls and X-ray room.

At the moment, the staff of Stomatology includes 83 research workers, i.e. 4 professors, 4 associate professors, 27 doctors (PhD degree), and 48 assistants. The studies take 5 years and the number of students in each year is 60. To be admitted, students have to take an entrance examination which is a test. Admission is granted basing on the test score. The students learn general medicine subjects according to the curriculum. In senior years, specialistic subjects prevail. At the end of each academic year students are obliged to take examinations and get credits which qualify them for the next year of studies. After they have taken their master's examinations and received their diplomas they are obliged to do one year of training. Then they can take up independent work. In the future, there will be a state examination for the diploma.

The university also offers three-year PhD courses. Due to a large number of candidates and some financial problems of the university, we have been offering courses for a fee.

Their curriculum is the same as that of day studies.

All the chairs and departments run pre- and post-graduate training courses for various degrees of specialisation.

The doctors employed at Faculty of Stomatology carry out research, educational programmes and also treat patients. They publish the results of their research and take part in various conferences and symposiums.

The faculty has been transforming continuously both as regards the staff and the curriculum of studies. This has been going on more and more rapidly due to the changes in the Polish system of health care and our prospective joining of the European Community.

1.4. List names of persons who act as visitors on site visits to other schools

Name: **Assoc. Prof. Maria Chomyszyn – Gajewska**
 Subjects of expertise: **Conservative Dentistry & Periodontology**
 e-mail: **mdgajews@cyf-kr.edu.pl**
 Language: **English**

1.5. Basic data on students

- a) Average number of dental students qualifying per year: **66**
- b) Average number of dental students admitted to the first year: **60**
- c) Length of course in years: **5 years**
- d) Is there a separate period of vocational training following graduation as a dentist in your country?
Yes
- e) If yes to d) above, is that organised by the University/Dental School? **Partly**

1.6. List the Departments in the school and the total number of whole time equivalent clinical academic staff

Department of Prosthetics	21
Department of Oral Surgery	8
Department of Maxillofacial Surgery	6
Department of Orthodontics	9
Department of Introduction to Conservative Dentistry	16
Department of Conservative Dentistry	<u>23</u>
Total:	83

1.7. Number of auxiliaries trained each year

- a) dental nurses
- b) technicians
- c) hygienists
- d) dental therapists
- e) other expanded duty auxiliaries

These groups are educated in other, independent colleges.

1.8. Specialist and Higher degree training courses

The courses are listed in 19.2

1.9. Staff and Resources. Breakdown of staff numbers in Dental School/Hospital

a) Heads of Departments	6
b) Senior Clinical Academic Staff	27
c) Senior Research/Academic staff	-
d) All other Clinical teaching Staff	2
e) All other academic/teaching Staff	45
f) All administrative and secretarial staff	12
g) All nursing and auxiliary staff	44
h) Dental Technical Laboratory staff	22

- i) All clinical staff with exclusively service commitments,
excluding those listed and who are not involved in academic dentistry 2

1.10. Staff and Resources

Total number of all staff employed in Dental School: 160

1.11. Staff and Resources: Annual total salary budget for all staff of institution in Euros

Annual total salary budget of Collegium Medicum is : 4942030 Euros.
The Dental School allocation is 375300 Euros

1.12. Staff and Resources: Approximate ratio of full time staff to part-time staff in supervision of student`s clinical training

There is practically no part time staff

1.13. Staff and Resources: Average number of hours per week spent by full time senior clinical academic staff in treating patients

10 hrs

1.14. Number of hours students spend in patient treatment (on average) per week:

- a) year 1 0
- b) year 2 0
- c) year 3 2.5 hrs (second semester)
- d) year 4 12.33 hrs
- e) year 5 15.6 hrs

1.15. Number of hours students spend in "simulated" patient treatment per week in manikin or phantom head laboratory

- a) year 1 - 0
- b) year 2 - 4
- c) year 3 - 4
- d) year 4 - 0

1.16. Total number of patient visits to the Dental School/Hospital per year by department or clinic

Department of Prosthetics	5725
Department of Oral Surgery	7710
Department of Maxillofacial Surgery	
Department of Orthodontics	1350
Department of Introduction to Conservative Dentistry*	3116
Department of Conservative Dentistry**	9960

* one semester (third year) of treatment of caries and endodontics by students,

** treatment of caries, endodontic, paedodontic and periodontal,

Number of patients treated by students and dental staff are counted together.

1.17. Visitors comments to Introduction and General Description

The Dental School has a good staff student ratio. Unfortunately the financial allocation to the Dental School is small and staff have to spend a considerable proportion of time treating patients both to support the Dental Hospital and to augment their University salary.

The patient throughput is relatively small and students have a limited clinical exposure.

Section 2 –Facilities

2.1. Clinical Facilities

General Explanation

Clinical facilities are, as the whole Subfaculty of Dentistry, during the period of transition. The new building is partly equipped with modern dental chairs/units because the completing of the whole investment is planned for year 2001. So, temporarily, old equipment is used at present as the supplement.

The whole building is computerised, administration, treatment rooms etc. so patients shall have a file in a central registration room. Special, computerised registration system is being introduced.

There is central sterilisation room.

There are six main Departments/Clinics:

Department and Clinic of Maxillofacial Surgery: units for surgery, surgical rooms, operation theater, beds for patients. There is equipment for treating patients under general anaesthesia and nitrous oxygen sedation.

This Clinic is situated on one of the floor`s in the building of Rydygier`s Hospital and will remain as the building is new, modern and Clinic cooperates with other medical departments there.

Department and Clinic of Oral Surgery: 9 units for surgery (5 old + 4 new) in 2 surgical rooms, 1 operation theater (with one unit/chair), 1 room with 4 beds for patients

Department and Clinic of Prosthetics: 29 units for dental/prosthetic care (11 old+ 13 new + 5 operational)
Equipment: Co₂ laser
Technical facilities : 1 laboratory

Department and Clinic of Orthodontics: 9 units for dental/orthodontic care (4 old + 5 new) in rooms.
Equipment: program for computerised evaluation of cephalometric x-ray pictures.

Technical facilities: 1 laboratory

Department and Clinic of Conservative Dentistry: 37 units for dental care (paedodontia, periodontics, oral mucosa diseases, cariology, endodontics) (28 old + 9 new)
Equipment: 1 unit for periodontal surgery.
radiovisiography, intraoral camera, lasers (hard and soft lasers)

Department and Clinic of Introduction for Conservative Dentistry: 13 units for dental care (9 old + 4 new)

Central Outpatients Department : 2 units/chairs

Total number of dental chairs/units in the Dental Institute : 97

Strengths

As all the dental chairs are in the same building, and they are of multipurpose use, they might be used according to undergraduate and postgraduate teaching needs. There is also possibility of

interdisciplinary consultation all the time. After completion of investment the Dental Institute will be well – designed, with modern equipment.

Weaknesses

There are disadvantages of the transient period.

2.2. Teaching Facilities

There are two big lecture halls in the new building containing 95 seats each. In one of the hall's there is a dental chair for demonstration of clinical cases. Also several rooms serving for small groups of students to have seminars and study meetings are situated on all floors.

There are many (17) lecture halls, which are situated in the complex of departments of basic sciences , University Hospitals and Institute of Paediatrics. All needed lectures and activities for the undergraduate students are carried on there. In some of these there is multimedial and in other only audiovisual (projectors,overhead projectors, video) equipment.

Strengths

- lecture halls are equipped with modern audiovisual and multimedial devices which allow for taking advantage of benefiting equally from all activities taking place
- there are a cabin and equipment for simultaneous translation in one of the lecture halls (Montelupi building)
- the halls and rooms are also used for other than undergraduate teaching purposes such as postgraduate activities and scientific conferences and meetings

2.3. Teaching Laboratories

In the new building of Dental Institute there are two phantom head laboratories providing shared facilities for all propedeutical dental training. These will eventually have the latest phantom heads.

2.4. Research Laboratories

The Subfaculty of Dentistry has no separate research laboratories. It benefits from all possible laboratories in the Faculty of Medicine by utilizing their research facilities and qualified technical staff.

Strengths and weaknesses

It seems that being a part of Faculty of Medicine, and using its well equipped laboratories, qualified technical assistance and advice, allows for undertaking efforts to acquire funding for research solely.

2.5. Library

General Explanation

Collegium Medicum has one Main Medical Library for all its Faculties. There is also possibility of using the Main Library of Jagiellonian University and the Central Medical Library which is situated in Warsaw. All departments have their own small stock of books and journals, which are in everyday use.

In the new building of Dental Institute there is a library which will contain the specialist dental literature. As the five Departments has just moved into the new building, the library is in stage of being organised. It has reading (seats) and loan area, full-time librarian and is computerised.

The staff (librarians and auxilliary) in the Main Medical Library includes about 50 persons. In 1986 the Library moved to a new large building (service area 4778m²) with reading and loan area. The items include 256314 books, 73022 journals, 19903 specialised collections in different languages. It is constantly renewed. The Library is used by several thousand students and academic staff.

There is full cooperation between all libraries.

Access to Other Library Resources

The library offers possibility of making xerographic prints is computerised and allows access to Internet and library databases. The library staff helps the users in searching required items.

Information Service

Vital information is published on the library's home page. Library staff shows undergraduate students (and others) how to use library's collection of books and journals and how to search databases and Internet for useful and reliable information.

2.6. Visitors Comments on Section 2

The new Dental School has been built to a very high standard and when completed will have the latest equipment for undergraduate clinical training. The visitors were impressed with everything they observed and the facilities are undoubtedly among, if not, the best in Europe. All the clinics were labelled Prosthodontics, Orthodontics etc and it appeared that an opportunity was lost to introduce a polyclinic concept in the new design. (The introduction of polyclinics has been delayed by unforeseen circumstances during the move to the new building. They will for part of a new programme in the new building when it is fully operating.

The teaching laboratories provide excellent facilities for undergraduate education. The libraries that are available to the students and staff are at different sites however the continued development of the Dental School library will be of benefit to both Undergraduate and Postgraduate students and the staff.

Unfortunately there are no research laboratories in the new building. The building is sufficiently large to have incorporated research facilities in the design of this building, however, the cost of developing onsite research facilities was prohibitive. The current sharing of facilities with the Medical Faculty is working satisfactorily.

Section 3 - Organisational and administrative structures

3.1. Organisational Structure

The organisational structures under which the school operates including its relationship to hospital, university, medical school/faculty as well as the departmental structures within the dental school.

Three faculties (Medicine + Dentistry, Pharmacy, Preventive Medicine+ Nursing) are called Collegium Medicum. They have considerable financial autonomy, supported by both Ministry of Health and Ministry of National Education.

There are also four University Clinical Hospitals including the University Clinic of Dentistry (Dental Institute, situated in the new building in Montelupi street) which are at present the property of Collegium Medicum. They consist of the same departments as in the Collegium Medicum structure and are the educational basis for students and regular health care institutions, offering medical services. The organisational structure of Collegium Medicum is a dual authority system, that is academic line and the administrative line of authority.

Section 4 –16 The Dental Curriculum

Introduction

The academic year starts on 1st of October and lasts until about end of June. The first three years are in semester system (a year is divided into 2 semesters) and the 4th and 5th year are in block system. The students have two weeks of Christmas vacation, about one week vacation at Easter and summer vacation in July, August and September. There are also some breaks before examination time. The course of dentistry is of 5 years duration and leads to the degree of "stomatologist" (lek.stom.). After the graduation, there is one year vocational, clinical

training after which there will be a nationwide obligatory examination (starting in 2003). Then, one may register as dentist and obtain a licence to practice from the Chamber of Physicians.

The dental students have medical subjects at the first years of study, but the programme differs to some extent from medicine. In the first three years there is an emphasis in the basic and biomedical sciences and consecutively the students are introduced to the dental sciences. The dental subjects start at the second year with propedeutical training, and clinical training in the second semester of the third year. The clinical training in all fields of dentistry became gradually more and more advanced heading into a "total, complex treatment aspect". This year University is entering ECTS Information system which has started to function in Poland .

Teaching and Learning Methods

At the moment, traditional, disciplinary orientated program prevails. Students are divided into groups according to the specificity of the subject , usually 4-6 persons when in clinic. Such group has one tutor or instructor present (academic staff).

Teaching/learning methods are lectures, seminars, laboratory and preclinical courses, clinical demonstrations and clinical practice.

There is a cooperation with Institute of Pediatrics during pedodontic course. Also, children from kindergarten orphanages and special centers are taken care of by students.

There is a summer practice after third (as dental assistant) and fourth (at dental chair under supervision) years.

Student Exchange

Through the Socrates/Erasmus programme, in collaboration with the European Union, students at the Subfaculty of Dentistry have the opportunity to spend three months abroad. As this programme started in Collegium Medicum last year only, this year is the first when it functions.

Students can go on the exchange within several international collaboration programmes which exist in Collegium Medicum:

- 1) University of Louvain (Belgium)
- 2) Grodno State Medical Institute (Belorus)
- 3) Amiens (France)
- 4) Bordeaux (France)
- 5) Clermont Ferrand (France)
- 6) Montpellier (France)
- 7) Groningen (Nederland)
- 8) Berlin (Germany)
- 9) Bochum (Germany)
- 10) Bonn (Germany)
- 11) Goetingen (Germany)
- 12) Heidelberg (Germany)
- 13) Koeln (Germany)
- 14) Muenster (Germany)
- 15) Regensburg (Germany)
- 16) Wuerzburg (Germany)
- 17) Munich (Germany)
- 18) Rochester (USA)
- 19) San Diego (USA)
- 20) Kiev (Ukraine)
- 21) Lvov (Ukraine)
- 22) Sheffield (UK)
- 23) Messyna (Italy)
- 24) Rome (Italy)
- 25) Pavia (Italy)

Section 4 – The Biological Sciences

4.1 Biochemistry

Introduction

Biochemistry is one of the major basic sciences that provides knowledge of principles concerning governing the functioning of living organism. It is considered an indispensable part of medical and dental students' curricula. The biochemistry course covers structures and biological roles of biopolymers and low molecular weight compounds of physiological importance, metabolism of carbohydrates, lipids, amino acids and other nitrogenous compounds, interrelationships between metabolic pathways, rules of intercellular communication and regulation of metabolism in various cells and tissues. Through the whole course attention is paid to the major recent developments in the field.

Aims

- To show and discuss the relation between structure and function of various biopolymers and to exemplify how defects impair their functioning.
- To create the integrated view of basic human metabolism including the understanding of relations between chosen diseases, their clinical manifestation and metabolic processes behind.

Main Objectives

- Protein structure, properties and function; enzymes;
- DNA and RNA structure and metabolism
- TCA cycle and oxidative phosphorylation
- carbohydrate degradation and biosynthesis - storage diseases
- lipid catabolism and biosynthesis - lipidoses and hyperlipoproteinemias
- metabolism of amino acids and nitrogenous compounds - defect in their metabolism.
- metabolic interrelationships and specificity of various tissues (connective tissue - blood, bone)
- signal transduction and hormonal regulation of fuel metabolism
- Nutrition (iron and calcium metabolism); detoxification (free radicals and xenobiotics)
- biochemistry of disease - genetic diseases, oncogenic transformation of a cell.

Hours in the Curriculum

150 hours

Method of Learning /Teaching

Biochemistry course lasts for two semesters (30 weeks) - I & II semester of 2 year of studies. Lectures (90 h) are given twice a week.. Once a week there are seminars (60 h) which are carried out in form of discussion and repetition.

Assesment Methods

Partial exams are made after each separate part of a course - four times during the academic year (twice in semester I and twice in semester II). The written examinations are aimed to teach students to develop the ability for concise and logical presentation of a considered problem. Students are credited based on their achievements - grades of partial exams and activity on seminars but generally all are permitted to take final exam. The final grade is issued based on: (1) evaluation of the final exam and (2) grades of partial exams.

Strengths

Weekly meetings of students with teaching aids allows them to create a constant interaction between the presented and the students perceived knowledge.

Weaknesses

Lack of practicals - large number of students makes very difficult to run satisfactory number of practicals due to their increasing costs.

4.2. Genetics (Medical Genetics)

Person who will explain and show this to the visitors: Prof. Z. Srebro, Dr. K Kowalczyk, Dr. P. Sura

Introduction

Many human diseases are genetically determined, among them several inborn diseases of the face, jaws, gingiva and teeth. It is necessary to teach dental students these basic facts in medical genetics. Medical genetics of dental students is taught for 30 hours during the third year of studies.

Primary Aims

To ensure that students understand the basis of genetic inheritance and the genetic causes of inborn errors of metabolism and malformations.

Main Objectives

- The students should understand the nature of genetic material, its transcription and translation into protein structure, the basis of classic (Mendelian) inheritance.
- The human karyotype and abnormalities of chromosome numbers and structure, and its effects on human health.
- The structure of mitochondrial genome and its mutations with effects of human health.
- The life cycle of retroviruses and the genetics of HIV infection, the role of transposons and retrotransposons.
- Prions and mutations causing prion diseases.
- Mutations and repair of DNA and its repair and diseases of faulty repair.
- The inheritance of some dental diseases, e.g. amelogenesis imperfecta, dentinogenesis imperfecta, etc.
- The HLA systems, its inheritance and role in antigen presentation and transplant rejection.
- The population and environmental genetics of human.

Hours in Curriculum

30 hours in the third year.

Method of Learning/Teaching

10 hours of lectures on basic problems and 20 hours of seminars.

Assessment Method

Credits are awarded after examination..

4.3. Biology (Biology and Medical Embryology)

Introduction

A course of 15 hours lectures and 45 hours seminars during the first semester of the first year.

Primary Aims

To present basic biological rules and factors and teach students human embryology with causes of developmental defects.

Main Objectives

On completion of the course the students should have an understanding of the following topics:

- The cell and its functions.
- The genetic material.
- Cell division: mitosis and meiosis.
- Gametogenesis. Fertilisation. Embryonic development.
- Development of organs particularly the face, pharynx, oral cavity, jaws, and teeth.
- Developmental anomalies of the pharynx, jaws and teeth.
- Gerontobiology: genetic and epigenetic mechanisms of ageing.
- Biological rhythms.

Hours in the Curriculum

15 hours of lectures and 45 hours of seminars during the first semester.

Methods of Learning/Teaching

Teaching with slides, films, handouts and discussion with students.

Assessment Methods

Two colloquia, Final examination is a multiple choice.

Strengths

Personal contact with students during lectures (questions put by students) and discussion in the course of seminar.

Weaknesses

Poor provision in audiovisual hardware and software.

Plans for Future

Demonstrations of malformed embryos and histological preparations from their malformed organs.

Visitors Comments on Section 4: The Biological Sciences

The visitors did not meet with the teaching staff from Biological Sciences. 240 hours of teaching are allocated to the Biological Sciences. The course is integrated with the medical course and lacks particular application to dentistry.

Section 5 – Pre-clinical Sciences

5.1. General Anatomy

Introduction

Teaching of osteology and central nervous system is based on systemic knowledge, while the remaining chapters (thorax, head and neck, abdomen and pelvis, upper and lower limb) are taught topographically. General anatomy, osteology, skull, central nervous system, head and neck with senses are taught during the first semester, while the thorax, upper limb, abdomen and pelvis, and lower limb are covered during

the second semester. It is suggested that the proper anatomical nomenclature (according to Nomina Anatomica both in Polish and Latin languages) be used. A synchronized program of lectures and tutorials encompasses descriptive, topographic and functional anatomy, as well as selected elements from organogenesis; seminars concentrate on oral and clinical anatomy.

Primary Aims

- To present the structure of the human body, taking into consideration its developmental, descriptive, topographic, and clinical aspects.
- To form the foundation necessary to understand human physiological functions, pathological processes, and clinical subjects.

Main Objectives

Students are required to have an appropriate understanding of the following :

- The axes, planes and regions of the human body
- The skeletal system including joint classification, with particular emphasis on the cranium, mandible and temporomandibular joint.
- The development, ontogenetic and clinical divisions of the brain, detailed external and internal structure of the brain; detailed knowledge of the route and function of projectory descending and ascending tracts, visual, auditory, vestibular, olfactory and gustatory pathways; arterial and venous blood supply of the brain and the spinal cord. Circulation of the cerebrospinal fluid.
- The pharyngeal arches, development of the oral cavity, nasal cavity, pharynx, and face, clinical aspects of common congenital malformations. The muscles of the head and neck. Topography of the main arteries, contents of the cranial fossae. Localization of the lymph nodes.
- The detailed knowledge of cranial nerve routes, ramifications and range of innervation
- The detailed structure, topography, vascularization and innervation of the nasal cavity and paranasal sinuses.
- The lines, landmarks and topographic regions of the thorax. Divisions of the thoracic cavity. The trachea, lungs, the thoracic wall and diaphragm, the heart and great vessels.
- The abdominal and pelvic divisions, detailed structure, topography, blood and nerve supply, basic function of digestive, urogenital systems, spleen and adrenal glands.
- The knowledge of the position, attachments and function of muscles of the upper and lower limb. Blood and nerve supply of the limbs.
- Selected problems of clinical anatomy.

Hours in the Curriculum

Total contact hours in the first year are 285.

Total contact hours in subsequent years in terms of the integration of anatomy in clinical practice is unquantifiable in terms of hours and instead is expressed in educational objectives and outcomes.

Method of Learning/Teaching

The whole program consists of lectures (90 hours), seminars (10 hours) and lab-sessions (185 hours).

Students spend the time studying in groups of 11-16, using bones, prosected specimens, models, charts, atlases of anatomy and other material provided. The staff members discuss the topic with the students, who are also encouraged to visit the dissecting room and view relevant dissections. Topics are planned in a sequence designed to ensure the gradual development of an overall understanding of the interrelationship of structures of the human body.

Assessment Methods

Student's knowledge is evaluated on a continual basis during tutorials, where short quizzes are given on current material. The final examination is a comprehensive evaluation composed of practical and theoretical elements. The theoretical part consists of short-answer questions.

Strengths

The members of the teaching staff are practicing physicians, since then it is possible to correlate anatomical and clinical information obtained by the students during the course.

Weaknesses

Deficiency of human cadavers for dissections.

Plans for Future Changes

The development of a course workbook to be supplied to each student at the start of the course. When completed this should constitute, for each student, an immediate reference source for essentials of head and neck anatomy. Introduction into teaching process some modern audio-visual techniques, models and anatomical charts. Modification of the course program based on wide discussing of clinical problems and their relation to the anatomical ground.

5.3. Histology (Department of Histology)

Introduction

The course of histology is taught in the 1st year (2 semesters) of the dental undergraduate curriculum. It includes (1) weekly lectures presenting the theoretical concepts of microscopical structure of tissues and organs, as well as its functional significance, (2) weekly laboratory sessions aimed at students' work with the microscopes and histological slides in order to improve their understanding of the subject and skills required for identification of histological structures, and (3) review seminars (2nd semester only) helping the students in their preparation for the final examination. As compared with similar course offered to medical students, special emphasis is put on the mineralized tissues, structures/organs associated with the oral cavity, and, most specifically, teeth - their structure and development.

Primary Aims

- To provide students with a basic knowledge and understanding of histology and its significance in the knowledge of human structure and function.
- To enable students to understand the histological aspects of clinical dentistry.

Main Objectives

At graduation students are expected to have an appropriate knowledge of the following:

- Cell structure and functions
- Composition, structural variants and functions of the four principal tissues: epithelial, connective (with special emphasis on cartilage, bone and blood), muscular and nervous (including sense organs)
- Microscopical structure and function of the vascular system, respiratory system and lymphoid organs (including elementary principles of immune reactions)
- Microscopical structure and function of the digestive system (with special emphasis on the teeth and oral cavity with the associated glands) and urinary system
- Microscopical structure and function of the integument
- Microscopical structure and function of the endocrine system (glands, DNES cells)
- Microscopical structure and function of the male and female reproductive systems
- Practical identification of cells, tissues, organs and their specific structures in histological slides and electron micrographs

Hours in the Curriculum

Course: 135 hrs, including:

- Lectures: 2 hrs weekly, total 50 hrs

- Review seminars: every second week in the 2nd semester, total 10 hrs
- Laboratory sessions: 3 hrs weekly in the 1st semester, 2 hrs weekly in the 2nd semester, total 75 hrs

Method of Learning/Teaching

- lectures supplemented with visual aids
- laboratory sessions with tutored interpretation of histological slides and electron micrographs
- review seminars based on projection of diapositives showing representative microscopical images of tissue/organ structures

Assessment Methods

Three mid-semester tests (two in the 1st semester, one in the 2nd semester) which must be passed for satisfactory completion of the course and final examination allowance; final examination composed of the laboratory part (identification of histological slides and electron micrographs) and the theoretical part (30 short structured questions).

Strengths

Good organization of the course: close links between lectures and laboratories, the former ones always preceding the latter ones. Emphasis of the practical aspect of histology (identification of slides and electron micrographs), additional opportunity for self-learning during review sessions.

As judged by good results achieved by the students during the final exams, the teaching process is very effective; a substantial contribution to this is a textbook written by the staff of the Department.

Weaknesses

Some topics in the programme may be regarded as less relevant to dental students, while the others deserve more emphasis, hence the content of the curriculum is being reviewed and appropriate correctures are planned.

Innovations and Best Practices

At the end of the academic year students are asked to evaluate anonymously in a standardized questionnaire the relevance of the programme, as well as methods and quality of teaching. The results are analysed to ensure the deficiencies are rectified at the earliest possible opportunity. The questionnaire is a part of evaluation of teaching organized by Dean's office, concerning all subjects included in the curriculum.

Plans for Future Changes

Computer-based presentations will be introduced as an additional visual aid for lectures. Students will have the opportunity to improve their self-learning by getting access to student-oriented histology software in the newly created Laboratory of Medical Education, belonging to the Department of Histology.

Visitors Comments on Section 5: the Pre Clinical Sciences

The preclinical sciences are taught jointly with the medical students. The dental component is small. Some reorganisation of this course to reduce the general anatomy component and increase the head and neck component would make this course more relevant to dental students. It could also reduce the number of hours devoted to the teaching of preclinical sciences. Students questioned the relevance of the contents of these subjects and would prefer a greater emphasis on teaching more related to head and neck..

Section 6 Para-clinical Sciences

6.1. Pharmacology

Introduction

Pharmacology course for dental students is comprised of about 60-h lecture and 55-h seminars based learning. The course is performed in their third and fifth year of training. Students learn the general principals of drug action and drug disposition in the body and study the effects of disease, pregnancy, and extremes of age on drug handling. They gain the knowledge of adverse drug reactions, drug interactions and effects of drug on infants when these are given to nursing mothers.

Primary Aims

- To provide dental students with:
- An understanding of principles of drug absorption, distribution, metabolism, excretion, mode of action and adverse drug reactions.
- Knowledge of drugs used in dentistry, the relevance of a concurrent medical condition and its therapy, the use of drug in pregnancy, lactation and extremes of age.

Main Objectives

By the end of the course, students will be able to:

- Describe methods of drug absorption, distribution, metabolism and excretion.
- List the principles of drug action and drugs acting on the autonomic system.
- List the actions of important autacoids and their antagonists.
- List the actions of important drugs
- List the groups of drug used in dentistry, their modes of action, metabolism, adverse reactions, precautions and interactions with other drugs.
- List the cardiovascular drugs, drugs used in diseases of respiratory system, drugs affecting central nervous system, renal functions and anticancer drugs
- Describe the precautions in prescribing drugs for pregnant and lactating women.
- Describe the precautions in prescribing drugs for patients particularly susceptible because of their age or a prevailing medical condition.
- Write a legal prescription for a dental patient with knowledge of drug schedules and controlled drugs under the current regulations.

Hours in the Curriculum

The course comprises of 2 hours of lectures and 2 hours of seminar weekly in third year of the studies. Teaching terms for dental students are longer than the traditional university terms. Currently each PBL session is of 90-minute duration. Fifteen hours of seminar are on the fifth year of training dealing with clinical pharmacology for dental students.

Methods of Learning/Teaching

Students learn Pharmacology from traditional lectures and from Pharmacology books. They also learn about drug treatment of various dental conditions from an extensive range of dental and medical problems under the PBL programme, which is continuously reviewed and updated.

Assessment Methods

There is a separate Pharmacology examination after the third year of training. During the third year of training there are also three oral tests. An oral test is performed after the completing the 15-h of clinical pharmacology on the fifth year of training.

Strengths

The method promotes the activation and elaboration of a prior knowledge to actively gain and seminar information on drugs used in dental treatment. Traditional lectures in general Pharmacology and some selected topics in systemic Pharmacology supplements this programme.

Weaknesses

The interest of pharmacology of dental students is restricted to subjects related to their dental practice.

Innovation and Best Practices

The key to the success of the programme depends on the design and quality of problem as well as of the teacher. The role of the teacher in this process is mainly supportive. There is an interdisciplinary approach to active students learning in which the teacher must motivate the students and provide directions to enable the students to acquire the necessary information.

Plans for Future Changes

The success in teaching depends on small discussion groups, which require more space and more teachers. It also requires the availability of adequate library, audio-visual facilities, and free access to Internet terminals specially configured for this purpose. All of those innovations require financial resources. The problems and assessment methods must be continuously reviewed and facilities provided for teachers to continuously update themselves and attend workshops wherever possible. Future development must also include the provision of unlimited photocopying and printing of published or Internet materials without causing infringement of copyrights.

6.2 General pathology – Pathomorphology

Introduction

This is a 1-year course of general and surgical pathology for students of V and VI semester of Faculty of Medicine Div. of Dentistry.

Primary Aims

To provide the student with:

- understanding of the disease process including etiology, pathogenesis, morphology and the basic surgical pathomorphology diagnostic process
- understanding of the interactive process by which a pathologist acts as a consultant to the clinician

Main Objectives

- general pathomorphology
- cellular injury and cellular death, growth, differentiation and adaptation abnormalities, some aspects of genetic and immunological diseases
- circulation disorders
- inflammation and repair (especially of the mouth, oropharynx, bones and salivary glands) pathology of some infectious diseases
- environmental and nutritional diseases
- basic pediatric pathomorphology
- neoplasia (general aspects, morphological diagnosis, cytopathology, fine needle biopsy, most common cancers - especially of the mouth, oropharynx, bones and salivary gland)
- systemic pathomorphology:
- some aspects of blood vessels and heart diseases, respiratory system diseases, blood cells and lymphoid tissue diseases, gastroenteropathology including liver and pancreas diseases,
- kidney and lower urinary tract diseases, male and female genital systems and the breast pathology, endocrine pathology, neuropathology, skin diseases, soft tissue and skeletal system pathology

- head and neck pathomorphology

Hours in the Curriculum

Total – 105 (45 hours of lectures and 60 hours of practical activities)

Method of Learning/Teaching

The course consists of several closely integrated elements as follows:

- lectures and histopathology lab and seminars are integrated and cover the same problem each week
- autopsy material varies depending on the material available

Assessment Methods

Short quizzes (three) should help in student self-assessment. The final exam is oral.

Strengths

It is a very good and well programmed course.

The course shows the students how pathology connects basic sciences with clinical practice and how the pathologist acts as a consultant to the clinician in dealing with difficult diagnostic problems.

Weaknesses

Integration and coordination of the course with microbiology is poor.

Visitors comments on Section 6: Paraclinical Sciences

Pharmacology and General Pathology are courses primarily for medical students. It is appropriate that dental students understand the principles of pharmacology and general pathology it is questionable however that they should be required to have the same detailed knowledge as medical students. In a crowded curriculum teaching in this area could be reduced by making the course more relevant to dentistry.

Section 7– Human Diseases

7.1 General Medicine

Introduction

The course is conducted in the Chair and Department of Internal and Agricultural Medicine Jagiellonian University School of Medicine, situated in the of Joseph Dietl Hospital in Cracow. The principal aims of the Internal Diseases course is to teach the students history taking, physical examination and clinical diagnostics as well as preparation of case history including differential diagnosis and therapy. During the whole course the students of III-rd and IV-th year of dentistry learn the rules of professional ethics and bedside manners, particularly in the case of suffering patient. At Jagiellonian University School of Medicine the Internal Diseases course has been included in the dentistry curriculum for many years. This course has been taught in the Department of Internal and Agricultural Medicine for 15 years.

Primary Aims

The primary aim of course is to teach principles of clinical diagnosis; prevention and therapy of internal diseases.

Main Objectives

- To learn the principles of internal diseases

- To acquire the skills of patient's history taking; physical examination and clinical differential diagnosis.
- To learn practical skills of the arterial pressure measurement; intravenous, intramuscular and subcutaneous injections; performing and interpreting allergic skin tests.
- To comprehend the principles of the laboratory diagnostics and its use in disease diagnosis and management.
- To acquire the basics of the improvement in life quality of patients suffering from chronic diseases; principles of proper nutrition and preventive medicine.
- To learn how possessed skills and knowledge of the internal medicine could be applied in the dental practice (e.g. oral manifestations of internal medicine).

Hours in the Curriculum

III-rd year	Lectures: 40 h Seminars and case presentations: 100h
IV-th year	Lectures: 20 h Seminars and case presentations: 40h

Method of Learning/Teaching

The methods of delivery are lectures and bedside teaching but also discussions and practical teaching during seminars and case presentations.

Assessment Methods

Students skills in history taking and physical examination methods are continuously assessed in a number of formats (e.g. case presentations).

After the 5-th semester in the 3-rd year of studies there is a practical and theoretical test based on the knowledge obtained during the lectures, seminars and case presentations. Students are also obliged to write patient's history. During the 7-th semester in the 4-th year students are obliged to write and present 2 different patient case histories. The whole course of internal diseases is completed with both theoretical and practical orals which are taken with the Head of the Department as the examiner.

Strengths

The main strength is a practical character of knowledge which is acquired by students during many hours of case presentations and observations of clinical practice. Special stress is put on oral manifestation of internal diseases.

Weaknesses

The weakness is lack of short internal medicine courses for dental practitioners to maintain and to develop skills and knowledge acquired during the course in the university.

Innovations and Best Practices

- Taking and interpretation of the allergic skin tests, principles of management drug (anaesthetic) induced anaphylaxis.
- Frequent use of visual aids during the lectures.
- Emphasizing the individual student work during case presentations.
- Special consideration of teaching the knowledge of internal diseases and the skills useful in dental practice.

Plans for Future Changes

- Intensification of cooperation with Joseph Dietl Hospital's departments (internal diseases; cardiology; neurology and rheumatology) for the purpose of enrichment of case presentations.
- Preparing modern textbook of the internal diseases for dentistry students.

7.2. General Surgery (1)

Introduction

Surgical tuitions for students of dentistry provide basic knowledge of pathophysiology of surgical diseases, theoretic knowledge of the most common diseases including their epidemiology, pathophysiology, and diagnosis and up to date possibilities of health treatment. In the first year studies the problem is based on structure, function and composition of the human body and general regulation of fluid, electrolyte imbalances and acid-base balance. In the second year students get to know the most common acute abdominal diseases and priorities and principles of emergency management also biochemical aspects of surgical treatment. The main idea of those surgical courses is to teach future dentists to use the surgical knowledge they have received.

Primary Aims

- To provide students with basic knowledge of general problems in surgery including pathophysiological aspects of surgical diseases.
- To teach students to compare the theoretical, surgical knowledge with the general practicion .

Main Objectives

- General problems in surgery. Regulation of acid-base balance and fluid and electrolyte imbalances. Composition of organism
- Diagnosis and treatment of the intestinal obstruction
- Inflammation of the soft tissues
- Trauma of the soft tissues
- Surgery of the chest, mediastinum and heart.
- Diseases of the liver, pancreas, gallblader and the bile tract.
- Cancer of the oral cavity.
- Cancer of the soft tissues, the bones and skin.
- Cranial trauma. Spine and vertebral core trauma.
- Basics of general anesthesia.

Hours in the Curriculum

In the first year 80 hours including lectures, exercises and seminars.

In the second year 40 hours including only lectures and exercises.

Method of Learning

See introduction

Assessment Methods

Students in the first surgical year are assessed at the end of term and there is only pass without mark. After the second year all students have to take an examination composed of practical and theoretical parts.

Strengths

There are many various surgical diseases being considered during the practical exercises and we try to do close liaison between assistant, students and Heads of the Surgical Department. This allows for evaluation of the theoretical knowledge.

Weaknesses

We are not able to find enough time for a practical exercises and seminars for all dental students.

Innovations and Best Practices

This surgical course is strictly designed for the dental students and we try to improve , year by year, theoretical knowledge in association with all Surgical Departments in Cracow.

Plans for Future Changes

We would also like to make sure those courses will give students the ability to solve main surgical problems in their future work.

8.2 General Surgery (2)

Introduction

Students of dentistry will take a course of general surgery in their 3rd and 4th year of studies. The course will take up advanced trauma life support and first aid in the surgical emergencies, basics of surgical pathophysiology, and a general look at specific surgical considerations. The course will contain elements of the following: urology, orthopedics, thoracosurgery, plastic surgery, neurosurgery and transplantology.

Primary Aims

- Acquiring essential theoretical knowledge and practical skills in advanced trauma life support and in applying first aid in surgical emergencies.
- Learning the basics of surgical pathophysiology, in particular: an systemic response to trauma, problems of shock, prevalent metabolic issues, the process of wound healing and surgical principles in oncology.
- General knowledge of specific surgical consideration

Main Objectives

After finishing the course the students should be familiar with:

- basics of first aid
- diagnosis and initial treatment in surgical emergencies
- systemic response to trauma
- pathophysiology and treatment of shock
- wounds; types, healing and treatment
- surgical infections
- basics of surgical oncology
- surgery of gastrointestinal tract
- vascular surgery
- thoracic surgery

Hours in the Curriculum

3rd year timetable comprises 30 hours of lectures, 12 hours of seminars and 38 hours of bedside teaching and case presentations.

4th year timetable comprises 10 hours of lectures and 30 hours of bedside teaching and case presentations.

Method of Learning/Teaching

- lectures with multimedial support
- practical training at the bedside
- clinical discussion and case presentations

Assessment Methods

3rd year: assessment of problem understanding during the seminars and case presentations, 4th year: the course will end up with oral examination.

Strengths

Many years of experience in teaching surgery has let our teaching team create a textbook specially designed for dentistry students needs.

Weaknesses

The classes (seminars, bedside teachings and case presentations) take place in the afternoons and evenings.

Innovations and Best Practices

The syllabus is specially designed for dentistry students and integrated with other disciplines.

Plans for Future Changes

We plan to shift the classes to the morning hours, which would allow to improve the quality of bedside teaching.

8.3. Anaesthesiology

Introduction

This course covers the following aspects of anaesthesiology:

- basics of general and local anaesthesia
- theoretical background of dental anaesthesia
- basics of intensive care
- new trends in resuscitation

Following the publication of Meechan (How to overcome failed local anaesthesia, Brit.Dental J 1999, 186/1: 15-20) the emphasis was shifted to reasons for local anaesthesia failures and methods for their overcoming.

Primary Aims

The course aims to:

- present the methods used in general and local anaesthesia
- provide theoretical background for dental anaesthesia
- present the current trends in first aid and resuscitation
- inform about techniques of conscious sedation

Main Objectives

Students shall learn:

- importance of psychological and pharmacological premedication,
- techniques of conscious sedation: indications, contraindication, drugs and doses, complications,
- techniques of local anaesthesia in dentistry,
- dealing with specific events: anxiety, stress, syncope etc.

Hours in the Curriculum

Students of IVth year of dentistry spend 6 x 2,5 hours on theoretical lectures, and 9 x 3 1/3 h are actively involved in assisting at the treatment of patients under general or local anesthesia. Main experience in dental anesthesia will be provided in oral surgery and dental out-patient clinics.

Method of Learning/Teaching

The didactic component will include an introductory course of five lectures on:

- Principles and complications of general anesthesia
- Principles and complications of local anesthesia
- Anesthesia in dental practice
- Intensive care: organisation, monitoring, methods
- New trends in resuscitation
- Written examination

The clinical course will consist of attendance at general and local anesthetic operating sessions. Complementary experience will be provide with attendance at oral surgery and dental out – patient clinics.

Assessment Methods

A written examination in anesthesiology will be undertaken by each student.

Plans for Future Changes

Prospectively, the course will include the information on:

- intraligamentary injection of analgesic drugs (such as opioids)
- new anaesthetic agent ropivacaine (as a plain agent)
- new drugs for conscious sedation
-

7.4 Pediatrics

Person in school who explains and shows this to visitors:

Introduction

The conception of the course is to provide four-year students with developmental aspects of the human, after being exposed to basic knowledge in the internal medicine. The course in pediatrics is focused not only on the development but also it enables to get acquainted students with clinics and principles of normal care for children.

Primary Aims

- To provide basic knowledge of developmental aspects in pediatrics
- To get acquainted with main disorders in pediatrics, and developed abilities of medical approach to the child in different periods of childhood
- To enable students to understand principles of newborn, infant nursing and care for the children.

Main Objectives

- Introduction to pediatrics- general aspects of developmental medicine (newborn, infant, child)
- Principles of nutrition
- Avitaminosis and rickets
- Aspects of pediatric gastrointestinal disorders (acute and chronic diarrheas, functional disorders, liver diseases)

- Aspects of pediatric nephrology (renal insufficiency and nephrotic syndrome).
- Aspects of pediatric cardiology (including heart defects)
- Aspects of pediatric hematology (including homeostatic disorders and leukemia)
- Aspects of respiratory tract diseases (pneumonia, laryngitis)
- Chosen infectious diseases

Hours in the Curriculum

Total number of hours devoted to this discipline is 60.

Methods of Learning/Teaching

The total number of hours is divided in 14 hours of lectures, 6 hours of seminars, and 40 hour of clinical presentation. The lectures are planed to provide students with basic knowledge in pediatric disciplines listed in Main Objectives; seminars are to discussed with students some practical aspects in pediatrics, and clinical presentation are enable students a contact with pediatric patient.

Assessment Methods

Students after accomplishing the course are assessed by oral exam.

Strengths

Students are exposed to pediatrics in the institution with long tradition of teaching medical students where all pediatric subspecialties are placed.

Weaknesses

During a relatively short course of pediatrics students can not see whole clinical variety of pediatric problems, so some of them can be missed during the course.

Innovations and Best Practices

This pediatric course is designed to provide dental students with basic knowledge in pediatrics relevant to general Dental School curriculum. There is always possibility to change the program according to students' comments, needs, and demands of the general curriculum.

7.6. Laryngology

Person in school who will explain and show this to the visitors:

Introduction

Otorhinolaryngology, the science of diseases of the ear, nose, and throat, includes conditions requiring both surgical and medical management. Laryngological problems account for approximately 30% of the visits to the first contact physician. However, the amount of time devoted to laryngology in the medical school curriculum averages less than two weeks of clinical experience. A knowledge of the ENT diseases seems to be important especially for future dentists considering common area of the interest.

Primary Aims

- The skill of laryngological examination by means of frontal lamp and speculum
- The first aid of the emergency patients

Main Objectives

- prevention, diagnosis and treatment of nasal space diseases and sinus paranasales
- allergic problems in laryngology
- physiology and pathology of Waldeyeri ring-i.e. lymphoid ring

- oncology of salivary glands, tongue and oral cavity
- infections and oncological problems of the larynx
- dentogenesis complications in laryngology
- pathology of mandibular joint

Hours in the Curriculum

The teaching program for dental students includes 15 hours of lectures, 25 hours of clinicals and 10 hours of seminars.

Methods of Learning/Teaching

- participation in a doctors rounds
- observing minor operations and changing of dressing
- viewing of major surgical procedures
- practical training in outpatient clinic

Assessment Methods

At the end of the course there is theoretical, oral diploma examination.

Strengths

Modern and sophisticated diagnostic methods, full range of laryngologic services, highly educated medical staff.

Weaknesses

Too many students participating in the course simultaneously in the Department, making teaching procedures difficult.

7.7. Infectious Diseases

Introduction

Infectious diseases course is planned to give a brief, accurate and up-to date presentation of those aspects of subject that are of particular significance for dental students. Presented topics reflect the remarkable advances that have been made in our knowledge of microbes and the molecular mechanisms of microbial disease pathogenesis, as well as in the development of modern laboratory and diagnostic methods.

Primary Aims

Main goals of infectious diseases for fourth-year students include transmission of necessary information to aid dental students in the understanding diagnosis, treatment and prophylaxis of infectious diseases. Emphasis is placed on viral hepatitis, HIV/AIDS, and infections of the central nervous system.

Main Objectives

This course covers major topics in infectious diseases:

- Principles of immunoprophylaxis of infectious diseases (active and passive immunoprophylaxis)
- HIV infection/ AIDS (epidemiology, route of transmission, clinical manifestation and classification of HIV infection, treatment)
- Acute infectious diarrheal diseases and food poisoning
- Central nervous system infections (bacterial meningitis, viral meningitis and encephalitis)
- Viral hepatitis (clinical features, differential diagnosis of jaundice, treatment)
- Differential diagnosis of fever states
- Sepsis and septic shock

- Selected diseases of the upper respiratory tract (Streptococcal pharyngitis, Vincent' angina, Diphtheria)
- Most common diseases caused by viruses (Herpesviridae: HSV, VZV, CMV, EBV; RNA viruses: influenza, measles, rubella)

Hours in the Curriculum

Lectures 10 hours, seminars 10 hours

During the course slides and video types are used. Selected case reports from the current medical journals and own practice are discussed.

Assessment Methods

Credit is four hours Students' knowledge is checked during seminars and at the end of the course by discussion with examinant.

Strengths

Topics are chosen with intent, that students will master real and most important problems of infectious diseases. During the course patients with different infectious diseases are presented, which allow students to posses practical knowledge.

Weaknesses

Because student's groups during classes are too large (10-11 persons), there is no adequate contact with the patient and individual student. It also influences interaction between students and teacher.

Innovations and Best Practices

This infectious disease course is designed for the dental students. Because of continuous evaluation of students learning and their comments on the course there are many opportunities to ensure the deficiencies, which can be rectified at the earliest possible opportunity.

Plans for the Future

We would like systematically create materials (slides, video types) which allow us to present to students most important problems and interesting clinical cases which they can meet during their every-day practice.

7.8 Dermatology

Introduction

The aim of educating Dentistry students is teaching them the basic problems of Dermatology and Venerology useful in the future dental practice with paying the special attention to lesions on the mucous membrane of the oral cavity and of the skin of the head and face. During this, elective students observe and participate in a busy Dermatology Clinic. Because Dermatology is a visual clinical speciality, the majority of teaching is at bedsides. Students can see dermatological manifestations of systemic diseases such as: Systemic Lupus Erythematosus, dermatomyositis and diabetes. They learn how to distinguish benign forms of skin lesions from malignant ones and when dermatologists help is necessary. Students are also assisting at surgical operations of skin cancers. Students learn different methods and medications used in dermatological problems as well as techniques such as punch biopsy, excisional biopsy and cryotherapy.

Primary Aims

- To acquaint students with main skin diseases, to teach them how to carry out diagnostic and plan treatment.

- To instruct students how to carry out dermatological anamnesis and physical examination.

Main Objectives

Dermatological semiotics

- viral and fungal disorders of the skin
- basic bacterial disorders
- allergic diseases
- erythematous disorders
- bullous disorders
- pre-carcinogenic states and carcinoma of the skin
- sexually transmitted diseases

Hours in the Curriculum

10 hours of lectures and 20 hours of exercises and bedside teaching.

Method of Learning and Teaching

Lectures, exercises and bedside teaching.

Assessment Methods

Students get the credit on the basis of their presence at obligatory classes as well as of the result of the written examination.

Strengths

As Clinic we consult approximately about 50 outpatients per day so it gives great opportunity to see different kind of skin lesions. Students can also observe serious skin diseases which have to be hospitalised. We have also surgical unit in our Clinic. Students can observe surgeon during work. They have possibility to operate themselves (small excisions, stitches) and observe postoperation care.

Weaknesses

Too many students in one group.

Innovations and Best Practices

This dermatological course is specifically designed for the dental curriculum which means that only the elements of dermatology deemed relevant are included. Because of the continuous evaluation of student learning and their comments on the course there are many opportunities to ensure the deficiencies are rectified at the earliest possible opportunity.

7.9. Allergology

Introduction

The course acquaints students with the basic principles of practical allergology needed today for daily stomatologic practice. Problem of allergy in stomatology still increases. It appears as a dmg allergy to prosthetic materials and latex. The teaching program includes theoretical and practical knowledge of allergology as well as the principles of the cooperation between stomatolog and allergist .

Primary Aims

To acquaint students with the basic principles of practical allergology:

- the skill of allergological axunination

- the procedures in allergic emergencies

Main Objectives

- pathomechanism of allergy
- clinical manifestation of allergy
- environmental allergens
- crossallergy
- allergy to dmgs and latex
- diagnostic procedures (skin testing and lab-tests)
- principles of the treatment
- procedures in allergic emergencies
- cooperation with allergist

Hours in the Curriculum

The course includes per year : 2 hrs of lectures, 2hrs of seminars and 2 hrs of manual training.

Methods of Learning and Teaching

- lectures, seminars (small gr. teaching)
- practical training in outpatient department

Assessment Methods

- credit test
- practical test after training

Strengths

- good educated and good prepared to didactics medical staff
- modem diagnostic methods
- full range of allergological services

Weaknesses

- Lecture hall far from the Department
- too small surface to disposition during practical teaching

7.10. Neurology

Introduction

Knowledge of neurological disorders based on neuroanatomic and neurophysiologic principles is important for future dentists considering common areas of interest. It is especially important in dentogenes complications in neurology. In addition, certain neurological problems, for example headache, are common complaints of patients in medical and dental practices.

Primary Aims

- to obtain knowledge of clinical neurology, learn how to take a neurological history, perform a neurological examination and interpret neurological findings to make appropriate diagnoses
- to learn which diagnostic measures should be used (lumbar puncture, EEG, EMG, CT, MRI, biopsy of nerve and muscle) in certain neurological disorders
- to recognize the specificity of the neurological patient and the organization of The Neurology Department

Main Objectives

- Neuroanatomical and neurophysiological basis for neurological disorders (site of the lesion)
- Headache (diagnosis and treatment)
- Epilepsy and Seizure disorders (classification and therapy)
- Cranial nerves disorders
- Stroke (prevention, differential diagnosis, stroke unit)
- Dementia (diagnosis and nerve treatment)
- Neck and Back Pain
- Neurological emergencies
- Neuroimaging of Central Nervous System (plain x-rays, myelography, CT, MRI, PET, SPECT, Digital Subtraction Angiography)

Hours in the Curriculum

Neurological course will contain 30 hours, including 10 hours of lectures and 20 hours of practical training

Methods of Learning and Teaching

Problem-based learning supplemented by lectures and practical training (history and examination of patient, rounds, resident conferences, neuroradiology and neuropathology meeting, outpatient clinic)

Assessment Methods

At the end of the course will be a theoretical examination (60 MCQ). Final grades will be given after the theoretical examination and evaluation of students by Neurology Attendings and Residents

Strengths

- Modern and sophisticated diagnostic methods (CT, MRI)
- Full range of neurologic services
- Highly educated medical staff

Weaknesses

Too many students participating in the course simultaneously in the Department, making teaching procedures difficult

Innovations and Best Practices

- more time spent on bed-side teaching and practical skills
- making the course more interesting by presenting new cassettes and educating materials

Plans for Future Changes

- use of modern audio-visual systems in the education of students
- working with smaller groups (no more than 5) students, especially for practical training

7.11 Physiology of pregnancy and delivery

Person in school who explains and shows this to visitors:

Introduction

Knowledge of Prenatal Physiology and Basic Gynecologic Oncology is essential for the education of every student at the Collegium Medicum. The syllabus includes 30 hours of lectures and practical

exercises, which mainly cover topics of physiologic changes during pregnancy, prenatal care, high-risk pregnancy, normal and abnormal labour and diagnostics in gynecology.

Primary Aims

To familiarize students with basic concepts of Gynecology and Obstetrics.

Main Objectives

At the end of this course students will be expected to know about:

- Phases in a woman's life.
- Pregnancy and prenatal care.
- Basics of high risk pregnancy.
- Delivery-kinds and possible complications.
- Pathology of the female reproductive tract : diagnosis, prognosis, treatment.
- Birth control.

Hours in the Curriculum

10 hours of lectures and 20 hours of practical exercises.

Methods

Seminars and bedside teaching.

Assessment Methods

During the course students are observed during bedside teaching and at the end there is a final exam.

Strengths

Students are allowed to come in at any time and participate in deliveries and observe surgeries.

Weaknesses

Little relevance between dentistry and gynaecology.

Innovations and Best Practices

Since there is little correlation between gynaecology and dentistry we try to present basic concepts and show simple, useful procedures.

Plans for Future Changes

To involve students more frequently in clinical practice.

8.14. Forensic Medicine

Introduction

A knowledge of basic problems in forensic medicine as well as good knowledge of medical deontology problems are necessary for proper development of every high-qualified person who works in the field of medicine. Developed skills could give the opportunity to prevent from many risky situations for the dentist and his/her patient, helping in successful professional life. There are 30 hours of forensic medicine and deontology for the stomatology students of their last (fifth) year of studies, with 20 hours of lectures and 10 hours of seminars, showing the most important problems, concentrating on some specific problems related to dentistry.

Primary Aims

- To enable the students to understand the key problems of forensic medicine, related to forensic autopsy, cause and mode of death, identification of the person and identification of the instrument, opinionating and examination of casualties, especially with facial injuries, problems related to disputed paternity and forensic toxicology.
- To provide the students with the basic knowledge of medical duties related to legal and ethical regulations as well as some important problems in opinionating related to medical malpractice.

Main Objectives

At graduation students are expected to have an appropriate understanding of the following:

- general aims and technique of forensic autopsy, necessary modifications of technique, possible ways of containing specimens for further examination, opinionating in cases of death related to "natural" cases as well as in cases of violent death, identification of the corpse, identification of the instrument, time of death.
- general rules in examination of alive casualties including facial injuries, rules of opinionating in such cases according to Penal Code regulations.
- correct blood groups identification and DNA tests related to problems of disputed paternity.
- basic methods and problems in forensic toxicology, mainly related to ethyl alcohol, carboxyhaemoglobin and drugs; the rules on blood samples obtaining from alive person for the determination of ethyl alcohol.
- main rules on opinionating of the medical error problems.
- medical duties related to legal and ethical regulations: medical certificate, opinion, expertise; medical secret; medical experiment; patient's agreement for treatment, medico-legal problems related to transplantology and abortion.

Hours in the Curriculum

As stated above, students devote 30 hours to forensic medicine and deontology: 20 hours of lectures and 10 hours of seminars, including: presentations of slides related to case histories, autopsy room presentation, haemogenetics and toxicology laboratories presentations as well as presentation of exhibits at our own museum of the Chair and Department of Forensic Medicine of the Jagiellonian University.

Methods of Learning and Teaching

Problem-Based-Learning supplemented by aids as stated in 4.

Assessment Methods

Forensic medicine ends with a written exam (marked). Deontology ends with a written credit.

Strengths

There are many well documented cases from the whole history of the Chair and Department, which help the students to understand required problems. There are about 900 autopsies performed a year at the Department, plenty of cases related to examination of alive casualties and opinionating based on the records of the case (outnumbering the autopsies), still giving new experience and good material for teaching (case presentations helping to consolidate and link the facts taken from "theory").

Weaknesses

The most important problem is possible lower students' motivation for the course, problems in which significantly differ from the clinical problems, giving "superficial" impression of irrelevance in spite of the fact that many problems (for example medical error) are actually "vital". Exhausting final clinical exams divert the students from both "physical" and "mental" attendance.

Innovations and Best Practices

Related to problems stated at 7.

Plans for Future Changes

Progress of forensic toxicology and haemogenetics (DNA tests) in the last years show the opportunity of changing of problems presented to the students.

Visitors comments on Section 7: Human Diseases

The stomatological approach to the curriculum is reflected in the number of hours (541) devoted to the teaching of Human Diseases and the wide range of topics covered. The relevance of the amount of information presented in these subjects to clinical dentistry is questionable. This was reflected in the discussions with the staff and students who recognised the importance of the subject but questioned the need for such depth of knowledge required to complete this course. A more integrated approach reducing the different subject groups could result in a more efficient delivery of this curriculum without compromising the contents.

Section 8 – Orthodontics and Child Dental Health

8.1 Orthodontics

Introduction

Students are introduced to orthodontics in the IV dental year. They have theoretical and laboratory sessions which should prepare them for the clinical session. Students participate in lectures, trainings and exercises. In the V dental year students spend most of the time in the clinic, working with patients. They also examine children in kindergartens and primary schools.

Primary Aims

Graduating students should be able to perform an appropriate diagnosis for all forms of malocclusion and evaluate the need for orthodontic treatment. Students should be able to perform simple interventions and to explain methods of prophylaxis.

Main Objectives

- To identify normal growth and development
- To develop a knowledge of normal development of the dentition and its influence in the development of bones of masticatory organ
- To appreciate the use of functional appliances in orthodontics
- To get to know etiology and pathogenesis of morphological and functional disorders
- Knowledge of indications and contraindications for teeth extractions while orthodontic treatments
- Knowledge of rules of team work which consists of orthodontics, periodontology and surgery

Hours in the Curriculum

A total of 150 hours are spent in Orthodontics. IV year students have 30 hours of orthodontics which include 12 hours of lectures and trainings and 18 hours of exercises with patients. V dental year students have 42 hours of lectures and trainings and 78 hours of exercises with patients in the clinic.

Methods of Learning and Teaching

The course is delivered with lectures, seminars, laboratory training and clinical practice.

Assessment Methods

In the IV year theoretical and clinical sessions have to be finished with a verifying test exam. In the V year students have to pass a theoretical test exam (following a theoretical session) to be allowed to participate in the clinical session with patients. At the end of the V year students should pass a diploma examination which consists of practical and theoretical parts.

Strengths

Students are allowed to diagnose a patient, to plan a treatment of less complicated forms of malocclusion and to perform simple interventions. They also have a chance to examine many children.

Weaknesses

Lack of coordination of orthodontics with paediatric dentistry. Student groups are overpopulated.

Plans for Future Changes

Modernisation of clinical equipment.

8.2. Child Dental Health

Introduction

The paediatric dentistry teaching begins on the fourth year of study with the theoretical and practical block of exercises. The special significance is putting on prophylactics and health promotion. The theoretical teaching is carried on in form of seminars and lectures. The practical teaching includes basics of prevention..

The course of practical education in paediatric dentistry is continued during the fifth year of study. The main theme includes treatment of children dental diseases.

Primary Aims

Students recognize problems connected with prophylactics and specificity of children's oral cavity treatment. The students on graduation should be able to recognize and treat dental child needs.

Main Objectives

- To understand the specificity of the paediatric dentistry (child as a patient in dental surgery, handicapped child needs)
- To know anatomo- physiological differences of children
- To identify problems connected with caries epidemiology, traumas, pulp therapy, abnormalities of dentition and prepubertal and juvenile periodontal diseases
- To realise the planned treatment due to ageing
- To understand and provide prevention in dental child health
- To know commercial dental materials used in dental child care
- To identify the more complex problems which needs interdisciplinary diagnosis.

Hours in the Curriculum

A total of 66 hours is devoted to paediatric dentistry. Students attended the fourth year of study have 5 hours of lectures, 15 hours of seminars and 5 hours of clinical exercises. In the fifth year of study students have 6 hours of lectures and 35 hours of clinical exercises.

Methods of Learning and Teaching

The paediatric dentistry teaching programme consists of lectures, seminars and clinical exercises. Students take part in dental health promotion programs in primary schools. Students treat patients in the clinic under the close supervision of a clinical teacher. The teaching is in small groups of 3-4 students.

Assessment Methods

The measure of the theoretical knowledge on the fourth year of study is carried out on seminars. An each student is marked individually. The fifth year student is assessed during the practical training by a clinical teacher. Students are required to achieve the set treatment standards for dental procedures. The final examination requires a knowledge of paediatric dentistry forms part of the examination in conservative dentistry at the end of the fifth year.

Strengths

The paediatric dentistry teaching is based on preclinical studies (on the second and third year of study) including knowledge of human anatomy, histology, physiology and general diseases.

Weaknesses

- the lack of integrated teaching with orthodontic, prosthetics and dental surgery
- insufficient time for practical training

Plans for Future Changes

- an integration the paediatric dentistry teaching with other specialities
- complex child treatment in dentistry
- to enlarge an amount of hours for practical training

Visitors Comments on section 8: Orthodontics and Child Dental Health

Orthodontics is considered in Poland, as in most European countries, to be a postgraduate activity. Students are taught to diagnose malocclusions and recognise the need for and limitations of treatment. The time spent in Orthodontics is large when the overall constraints on the timetable are considered. Insufficient time is allocated to Child Dental Health and there appears to be little integration of these subjects. An even distribution of the 216 hours between these subjects would appear a more appropriate distribution of the time.

Section 9 – Public Dental Health

9.1. Public Health

Theoretical and cognitive goals:

- Acquainting the students with the basic problems of public health and health policy
- Emphasizing the importance physicians' actions in resolving public health problems
- Acquainting the students with health care systems of the highly developed countries
- Acquainting the students with the organization of health care organization in Poland and its basic transformation trends.

Practical and cognitive goals

- Acquainting students with the basic legal regulations pertaining to the profession of a physician
- Acquainting the students with the basic legal regulations defining the organization and competencies of physicians' self-government
- Acquainting the students with major legal regulations pertaining to public health
- Acquainting the students with patient's rights

Teaching topics

Lectures:

- (a) The notion of Public Health and the scope of actions within Public Health:
 - Evolution of the notion of Public Health: traditional and contemporary understanding of Public Health
 - Scope and forms Public Health actions
 - Research and research trends in Public health
 - (b) The health care systems in highly developed countries:
 - Health care model based on health insurance: kinds of health insurance
 - Compulsory, free and complementary insurance
 - NHS model: British system of health care and its modifications in some European Union countries
 - American health care system
 - Similarities and differences in health care systems
 - Main trends of the European health care systems reform
 - (c) Health Policy and its scope of activities:
 - Basic aims of the contemporary health policy
 - Aspects and dimensions of health policy: international health policy and main subjects, national health policy (country and territorial units level – local health policy)
 - WHO health policy, WHO European Office activities, health policy of the European Council, European Union public health policy
 - National program for health in Poland: the main directions, subjects responsible for carrying out the program
 - (d) Health promotion as a new sphere of activities in health care:
 - Concept of health promotion
 - Scope of activities and subjects responsible for the activities and interventions
 - Health promotion in the national and international documents
 - (e) Basic legal regulations in Public health:
 - Basic regulations pertaining to medical professions
 - Basic regulations pertaining to health care institutions
 - Basic regulations pertaining to health status of the population
- Teaching hours: 30
Seminars and classes: 20 hours
- (f) Rights and obligations of a dental doctor:
 - Physician's rights
 - Physician's obligations
 - Relationship between physician' obligations and patient's rights
 - (g) Patient's rights:
 - Patient's rights in view of the international documents
 - Patient's rights in Polish legal regulations and in ethical codes of medical professions

- (h) Legal forms of performing the profession of a dental doctor:
 - Solo practice
 - Group practice
 - Employment in a public or non-public health care institution
 - Other legal forms
- (i) Basic principles of medical certification:
 - Principles of the certification with respect to temporary inability to work
 - Principles of the certification with respect to long-term inability to work due to illness
 - Other forms of certification and jurisdiction with respect to health
- (j) Rules pertaining to prescribing medications:
 - Principles of using medications: free medications, co-payment, full payment
 - Basic rules pertaining to prescribing medications
- (k) Organization and competencies of a physicians' self-government:
 - Competence of a physicians' self-government in Poland
 - Organs of physicians' self-government: country and regional
 - Legal proceeding in case of professional liability of physicians
 - Professional vs. legal liability of a physician
- (l) Continued professional education of physicians:
 - Specializations
 - Forms of postgraduate training
- (m) Environmental health:
 - Health situation in Poland, Europe and in the world
 - Contemporary trends and forms of activities in the sphere of environmental health
- (n) Rules of financing health care:
 - Problems of financing health care
 - Forms and types of financing health care – financing bodies and patient's share
- (o) Core of contracting health services:
 - Principles of contracting health service in view of the legal regulations in Poland
 - Contracting bodies: rights and obligations

Evaluation Methods

Written test

Visitors Comments on Section 9 - Public Dental Health

This course is too medically orientated with insufficient relevance to dentistry. It could be replaced with a course in Dental Public Health which could include a core of general public health.

Section 10 – Restorative Dentistry

10.1. Introduction to Conservative Dentistry and Conservative Dentistry Part I

Introduction

This program introduces the students to the treatment and prevention of dental diseases especially dental caries, patient examination and history taking. The students work with selected patients.

Primary Aims

- Taking patient`s history – examination and diagnosis.
- Working with the patient.

Main Objectives

The student must be able to:

- Physical examination – extra and intraoral diagnosis.
- Solving the diagnosis problems – treatment planning.
- Caries preventive treatment (prophylaxis)
- Perform local anaesthesia.
- Prepare and restore each class according to Black – select and manipulate appropriate restorative materials.
- Endodontics treatment – diagnosis, canal preparation, filling canal with gutta – percha by means lateral condensation.
- Undertake and interpret basic tests, X-rays, clinical tests.

Hours in the Curriculum

Introduction to Conservative Dentistry takes place in the third and fourth term of the second year with 16 hours lectures, 8 hours seminars and 64 hours laboratory training giving a total of 88 hours.

Conservative Dentistry Part 1 is taught in third year with lectures 10 hours, laboratory sessions 70 hours and seminars 10 hours giving a total of 90 hours.

Assessment Methods

- Clinical credits
- Clinical competences
- Exam

Strengths

Well motivated clinical teaching staff.

Weaknesses

We need to increase clinical hours 50 per cent.

10.2. Conservative Dentistry part II and Endodontics

Introduction

The Conservative Dentistry and Endodontics courses of education are integrated and take place in the fourth and fifth years of the study. The course consists of a cycle of lectures, seminars (fourth year), and clinical exercises (fourth and fifth year). The students are taught to examine the status of masticatory system, especially oral cavity and integrate the pre clinical theory (anatomy, physiology of masticatory

system, patomorphology, knowledge of dental commercial materials, conservative dentistry) and use it in practice. The students should be able to recognise, prevent, and treat dental hard tissues, pulp, and periapical dental tissues diseases.

Primary Aims

Theory:

- The students on the graduation should know etiology, symptoms, prevention and treatment procedures of dental hard tissues, pulp, and periapical tissues diseases
- The students ought to know the rules of treatment plan

Practice training:

- The students should be able to recognise, prevent and treat the diseases within the range of conservative dentistry

Main Objectives

- To integrate the pre clinical knowledge connected with masticatory system, especially oral cavity
- To know etiology and symptoms of dental hard tissues, pulp, and periapical tissues diseases
- To prepare treatment plan
- To acquire and develop skills in diagnosing and treatment procedures
- To practice the professional prevention from range of conservative dentistry
- To use in practice the rules of ergonomy, aseptyki, antyseptyki and the knowledge within the range of dental commercial materials

Hours in the Curriculum

In year 4, 215 hours are spent in conservative dentistry divided into 30 hours lectures, 30 hours seminars and 155 practical classes. In year 5 205 hours are allocated with 20 hours lectures, 30 hours seminars and 155 hours practical classes.

Methods of Learning and Teaching

The fourth year education course is divided into two blocks. The first one consists of lectures, seminars, and practical training. Every practical training is preceded a seminar twice a week. Second block fourth year students have only clinical sessions. Fifth year students attend practical training once a week during one block education course.

Assessment Methods

- theory is assessed at every seminar and colloquium (first block of the fourth year). 100% frequency is required
- clinical activity and skills are assessed after fourth (first and second block are assessed separately) and fifth year education courses
- student must perform a required range of procedures
- the final exam must be passed. The diploma is composed of the clinical part and theory. The clinical part consists of completing the clinical chart (status of masticatory system especially oral cavity, diagnosis, treatment needs, treatment plan), and performing a treatment procedure. The theory is an oral exam. The sets of questions are prepared earlier (20 sets). Each one includes seven questions from: conservative dentistry, periodontology, diseases of oral mucosa, pedodontics. The set of questions are drawn during an exam.

Strengths

- the course of education is based on pre clinical study (anatomy, physiology of masticatory system, histology, knowledge of dental materials), so it is possible to integrate the former knowledge
- possibility of integration of conservative and endodontic treatment

- the consultations with other specialities are possible

Weaknesses

Lack of qualified hygienists make team work impossible

Plans for Future Changes

Change of building will make possible the work more ergonomic and will make possible integrated treatment of patients.

10.3 Prosthodontics

(Fixed and Removable Prosthodontics. Edentulous State. Dental Occlusion and Function)

Prof. dr hab. med. Stanisław Majewski, dr n. med. Bartłomiej W. Loster

Introduction

Fixed and removable prosthodontics programmes introduce the student to the options available for restoration of partly dentate, and edentulous adult patients on an acceptable and appropriate biological and functional basis. These programmes develop the principles involved in assessment and construction of the fixed and removable types of prostheses, and management of the edentulous state. Students are trained in designing the prostheses, the required clinical procedures and some necessary laboratory skills. The clinical protocol for fixed and removable prosthodontics requires the student to carry out prosthodontic restoration under the supervision of specialist teachers, and to have each stage approved by them. On the first two courses student do exercise on phantoms and than they have two more courses for clinical exercises.

Primary Aims

The main aims of this course are:

- to develop an awareness of the need for comprehensive planning in case of partly dentate patients, and in the transition to the edentulous state, in order to ensure good oral health, good function, and patient satisfaction with the sequence of treatment and the final prosthesis,
- to train students in presenting the full range of options for rehabilitation of the partly dentate state, and edentulousness to give to the patient the knowledge of different options of treatment,

Main Objectives

- etiopathogenesis, diagnostics and prosthetic treatment of tooth loss and resultant disturbances of the stomatognathic system.
- mastery of Eichner, Galasińska and Majewski Classification systems.
- treatment the patient using a tooth-supported, removable prosthesis.
- knowledge and skill in occlusal analysis, planning and clinical procedures for the establishment of a suitable treatment position and occlusal plane in which to construct the proposed prosthesis.
- knowledge and skill in the design of all standard components.
- knowledge and skill in the design and clinical procedure for the provision of suitable supporting, retaining, stabilising and guiding alterations to the remaining dentition.
- knowledge and skill in identifying and prescribing alterations to the residual ridges and sulcus tissues when these are required for fixed and removable prosthodontics.
- knowledge and skill in treated edentulousness patients.
- knowledge and skill in treating patients using posts, single crowns, bridges - carrying out tooth preparation for single unit cast metal, ceramo-metal, composite-metal, Targis-Vectris and porcelain restorations (crowns, bridges, inlays, onlays).
- knowledge and skill in making and assessing provisional (temporary) restorations on teeth prepared for single unit crowns and bridges.
- knowledge and skill in the making of impression and master casts.

- the capability to communicate with the dental technologist and write a suitable prescription.

Hours in the Curriculum

II Year course:

The number of lesson periods: The total of 88 hours, including 16 hours of lectures, 12 hours of seminars and 60 hours of classes.

The objective of the teaching course in year II is the mastering by the students of the essentials of dental materials technology, and dental techniques along with the characteristics of laboratory and clinical equipment; making dental prostheses on models and reconstructing dental anatomy by means of modelling.

III Year course:

The number of lesson periods: The total of 90 hours, including 10 hours of lectures, 10 hours of seminars and 70 hours of classes .

The objective of the teaching course in year III is making the students acquainted with the essentials of dental prosthetics in its clinical and laboratory parts as well as acquiring practical skills in clinical procedures and laboratory techniques of making fixed prostheses.

IV Year course – clinical exercises:

6 hours of lectures,
10 of seminars
122 of manual training

V Year course – clinical exercises:

10 hour's of lectures
20 of seminars
130 of manual training

Method of Learning and Teaching

- Supervised Laboratory Exercises
- Supervised Clinical Exercises
- Problem-Based Learning
- Recommended reading
- Case-Based Learning
- Topic-Based Learning

Assessment Methods

- Pre-clinical competence
- Clinical Protocol stages repeated until correct
- Clinical Credits
- Formal Competences
- Final practical and theoretical Exam

Strengths

Integration of dental treatment with aspects of general medicine. Integration of the fixed and removable prosthodontics course to establish a rational approach to assessment and treatment planning for partly dentate patients.

Weaknesses

Finding enough suitable cases for all students.

Plans for Future Changes

Integrating the didactic process with other dental specialities. Introducing data base computer system.

10.4. Occlusion and Function of the Masticatory System

Introduction

The 4th year:

Studies have been designed to provide the 4th year students with theoretical knowledge and practical skills adequate to self – dependent estimation of prosthetic treatment indications in cases of less severe tooth loss by means of basic fixed and removable restorations. The aim of manual training is gaining the ability of denture designing and carrying out of the necessary clinical procedures.

The 5th year:

Studies have been designed to develop knowledge mastered in the 2nd, 3rd and 4th year so that a student will be able to assess the damage of the stomatognathic system, to plan and perform prevention procedures and prosthetic treatment in simple cases of destruction of dental arches. Competence for specialistic rehabilitation planning in cases complicated by morphological disturbances (malocclusions) and functional disorders (parafunction) of the stomatognathic system is also essential.

The clinical protocol for fixed and removable prosthodontics requires the student to carry out prosthodontic restoration under the supervision of specialist teacher, and to have each stage formally approved by them.

Primary Aims

- Indications and methods of prosthetic treatment of full and partial loss of dentition
- Clinical and paralelometric analysis of prosthetic area in aspect of planning denture prostheses
- Specificity of planning in cases complicated by morphological disturbances (malocclusions) and functional disorders (parafunction) of the stomatognathic system

Main Objectives

- aetiopathogenesis, diagnostics and specialistic treatment of tooth loss and resultant disturbances of the stomatognathic system.
- the indications for the rehabilitation of the stomatognathic system by means of prosthetic treatment and preparation of the oral cavity for such treatment.
- clinical and paralelometric analysis of denture bearing area.
- principles of removable dentures design.
- clinical procedures involved in application of dentures.
- laboratory procedures.
- prevention of the stomatognathic system diseases connected with application of dental prostheses.
- specialistic treatment syllabus contains diagnostics and principles of prosthetic treatment in cases of functional disorders of the stomatognathic system (parafunktion) , parodontopathy, pathological attrition of teeth and prosthetic stomatopathy.
- immediate approach, postoperative management.
- prosthetic proceeding in developmental age by means of the latest clinical methods and materials technology.

Hours in the Curriculum

4th year:

6 hour's of lectures,
10 of seminars
122 of manual training

5th year:

10 hour's of lectures
20 of seminars
130 of manual training

Methods of Learning and Teaching

- Supervised Laboratory Exercises
- Interactive Computer Program Learning is preparing
- Supervised Clinical Exercises
- Problem-Based Learning
- Recommended reading
- Case-Based Learning
- Topic-Based Learning

Assessment Methods

- Preclinical competence
- Clinical Protocol stages repeated until correct
- Clinical Credits
- Formal Competences
- Final practical and theoretical Exam

Strengths

Integration of the all kind problems of stomatognathic system.

Weaknesses

It is advisable to increase the number of didactic hours for the subject and to reduce the number of students in groups attending manual training lessons

Innovations and Best Practices

Integration with other subject

Plans for Future Changes

Integrating the options offered by implants for the support of removable prostheses into teaching, via demonstration clinical cases.

Visitors Comments on Section 10: Restorative Dentistry

Restorative Dentistry is divided into 4 areas; Introduction to Conservative Dentistry, Conservative Dentistry I, Conservative Dentistry II and Endodontics, Prosthodontics and Occlusion and Function of the Masticatory System with the teaching provided by 3 departments. It is difficult to see the justification for the division of Conservative Dentistry into 2 departments; this has resulted in duplication of teaching and conflicts in the contents of the teaching leaving the students somewhat confused. Restorative Dentistry is taught from year 2 through to year 5 giving a total of 1374 hours with over 25% of the time spent in nonclinical teaching.

The visitors would recommend a review of the teaching in this area with a maximum of 2 departments involved in the teaching i.e. Conservative Dentistry as a single entity. This would avoid unnecessary duplication of the teaching.

Section 11 – Periodontology

Introduction

Periodontology is taught on the 4th and 5th years of the study. The first stage of learning includes theoretical knowledge of anatomical and histological structures and physiology of periodontium. Students carry out simple hygienic and prophylactic procedures and colour tests. The 5th year comprise series of professional learning e.g. lectures, seminars and practical exercises managed by periodontologists. The course includes patient's examination and hygienic procedures (scaling and polishing). Students mark clinical and radiological indices, suggest treatment plan also assist at surgical operation.

Primary Aims

- knowledge concerning prophylaxis, aetiology, and symptoms in periodontal diseases.
- diagnosis and describing treatment plan of pathological within periodontal diseases

Main Objectives

The students should know:

- anatomy and physiology of healthy periodontium
- aetiology of periodontal diseases
- clinical pattern of periodontal diseases
- the main of therapeutic proceedings and define the treatment plan
- methods of prophylactic and hygienic procedures (scaling and polishing)
- principles of non-surgical treatment
- principles of surgical treatment e.g. reparation and regeneration
- treatment of acute inflammatory infections
- correlation between periodontal diseases and general health status

Hours in the Curriculum

Periodontology exercises begin on the 4th year of the course and include 25 hours (lectures-10 hours, exercises-15 hours) and they are continued on the 5th year –50 hours (lectures-10 h., exercises-30h., seminars-10h.)

Methods of Learning and Teaching

There are lectures and seminars as an introduction. Practices are conducted by periodontologists (one doctor per 4 students).

Assessment Methods

Credit is given on condition:

- student was present at exercises and seminars
- student completed successfully the periodontal procedures
- student passed the oral test at the end of the 5th year course
- The final exam is included in diploma examination of Conservative Dentistry

Strengths

A great number of practical exercises. Possibility of consultation.

Weaknesses

Small number of hours devoted to clinical work is insufficient for the students to gain experience in surgical treatment. Lack of hygienists make impossible to work in a team.

Visitors Comments on Section 11: Periodontology

Periodontology forms part of Conservative Dentistry 11. Practical work is for only 45 hours which includes phantom head work. This is insufficient experience in a subject which is fundamental to successful Restorative Dentistry. It is not necessary for students to have obtained experience in surgical periodontal therapy however they should be competent in nonsurgical periodontal therapy. There is insufficient time in this curriculum for students to achieve this competency.

Section 12 - Oral Surgery, Oral Radiology

12.1 Oral Surgery

Introduction

Oral Surgery is taught in the 4th and 5th years. The basis for the course (topographic anatomy, histology, pathophysiology and oral microbiology) is provided in the first 3 years of study. Courses in general medicine such as: general surgery, internal diseases, oncology, otolaryngology, radiology and dermatology are taught in parallel with oral surgery.

Primary Aims

- To provide student with the knowledge both theoretical and practical for the future professional work in the area of oral surgery.
- To teach the student methods of diagnosis and treatment of diseases of the oral cavity, especially odontogenic ones, as well as carrying out under local anaesthesia minor surgical procedures, such as tooth extractions and treatment of inflammatory processes of the oral tissues.

Main Objectives

- Physical examination and accessory investigations
- Local anaesthesia for oral surgery
- Exodontia – indications, contraindications, instruments, techniques, post-extraction complications and their treatment
- Surgery on the alveolar process: apicectomy, tooth hemisection, tooth replantation, extraction of retained teeth, cystectomy, preprosthetic surgery etc.
- Trauma of the teeth and their management
- Treatment of inflammatory processes of oral soft tissues and jaws particularly of odontogenic origin
- Odontogenic maxillary sinusitis and its treatment
- Diseases of the temporo-mandibular joint – diagnosis and multidisciplinary treatment
- Facial pain syndromes and symptomatic neuralgia of the trigeminal nerve
- Oncological prophylaxis in dentistry, precancerous states of the oral mucosa and their treatment

Hours in the Curriculum

Total hours in the 4th and 5th years – 238 hrs

Lectures – 38 hrs

Seminars – 80 hrs

Practical classes – 120 hrs (4th year – 6 hrs per week, 5th year – 8 hrs per week)

Methods of Learning and Teaching

In the 4th year the students are taught methods of examination, local anaesthesia and tooth extractions
In the 5th year the student carry out extractions and other surgical procedures such as: abscess incision, suturing post-extraction wounds and assists in more complicated surgery (apicectomy, removal of retained roots,, closure of antro-oral fistula following tooth extraction)

Assessment Methods

Continuous assessment of the student's theoretical knowledge and practical skills during seminars and practical classes. In the 4th year two mid-semester oral tests, and one in the 5th year. There is a final, diploma examination (practical and theoretical). Admission to this examination is based on the required performance of 20 extractions under local anaesthesia.

Strengths

During the course in oral surgery the student has an access to a full range of the newest techniques of diagnosis and treatment: radiovisiography, stoma-vision, pantomography, surgical and biostimulating laserotherapy, cryotherapy, general anaesthesia, etc.

Weaknesses

All dental departments are dispersed in various buildings, which makes difficult interdisciplinary consultations and integrative teaching. Group size in practical classes (4 students per 1 teacher).

12.2 Maxillofacial Surgery

Introduction

Maxillofacial surgery is introduced into the curriculum in the 5th year of Stomatology and 6th year for the students of Medicine. The foundation for the course is provided in the 3rd year with course in General Surgery and in 4th year with course taught in Oral Surgery.

Primary Aims

- To teach students basic rules of planning diagnostic procedures and the rules of first aid in facial injuries.
- To develop in the student an awareness of the need for early diagnosis of the tumours of the oral cavity and prophylaxis in oncology.

Main Objectives

- The student should know at the completion of the course:
- Basic information on maxillofacial traumatology (including visual system injuries), head and neck oncology, congenital deformities, diseases of temporo-mandibular joint, inflammatory processes in head and neck region (especially osteomyelitis).
- Epidemiology, pathophysiology, diagnostics (including radiology and histology), methods of treatment of the above mentioned diseases of head and neck
- Basic elements of reconstructive and plastic surgery of the face, prosthetic rehabilitation in oncological patients.

Hours in the Curriculum

75 hours

Lectures - 15 hours

Seminars – 20 hours

Exercises – 40 hours per year, 4 hours per week

Methods of Teaching and Learning

Maxillofacial surgery is taught during lectures, exercises and seminars. Practical exercises follow lectures. Students have opportunity to master physical examination of the patients during exercises on the clinical ward and in the out - patient department. Students are encouraged to learn basic methods of immobilisation of maxillary and mandibular fractures and principles of facial wounds closure. Also they take part in surgical operations in the operating theatre where principles of aseptic procedures are taught. In the ward and in the out – patient department undergraduates take part in all diagnostic procedures in oncological patients (taking biopsies, planning and interpreting radiological examinations), also in planning surgical treatment and reconstructive procedures. At the end of the course undergraduates should be able to formulate clinical diagnosis with elements of differential diagnosis.

Assessment Methods

Theoretical knowledge is checked during seminars. Every part of maxillofacial surgery is followed by an oral examination. Students have to present full case history at the end of practical exercises. Final exam is oral.

Strengths

Moving the Department to the new hospital has markedly improved the environment for teaching undergraduate students.

Weaknesses

The groups of students are still too large. Further decrease in number of students in the group will result in better quality of the practical exercises.

Innovations and Best Practices

Teaching maxillofacial surgery at the final year of studies after the full course of general medicine and oral surgery.

12.3. Oral/Dental Radiology and Radiography

Introduction

Radiology course is carried out in the third and fourth year for stomatology students. The time of teaching is 46 didactic hours. On the third and fourth year, apart from subjects concerning stomatology, general medicine courses are carried out. Basic general radiology activities are carried out on the third year. On the fourth year all activities concern dental and maxillo-facial radiology.

Primary Aims

The primary aims are:

- to develop students' understanding of basic physical phenomenon involved in producing x-rays, principals of radiological protection, construction of equipment for diagnostic imaging in general and maxillofacial radiology, algorithms of diagnostic procedures.
- to develop students' knowledge of the relevant dental and maxillofacial radiological anatomy and pathology, and interpretation of basic radiological images in health and disease.

Main Objectives

- The student should understand the indications and contraindications for use of radiographic imaging in dentistry and the most appropriate views in different clinical situations.
- The student should learn how to perform an intraoral x ray using classical radiography or digital radiography and participate during making occlusal films, bitewing films and pantomographic films.

- The student should understand different dental radiological imaging methods, comparison of advantages and disadvantages of each method and advantages of reducing radiation doses.
- The student should understand the diagnostic imaging algorithms used in different clinical conditions.
- The student should understand the normal dental and maxillofacial anatomy as seen on common images and should be able to describe common pathological conditions affecting the teeth and maxillofacial structures.
- The student should have basic knowledge concerning general radiology.

Hours in Curriculum

3rd YEAR - Basis of general radiology

Spring semester – 16 hours including:

8 hours of lectures

8 hours of practical workshops

Atestation on the IIIrd year is granted on the basis of attendance to the workshops

4th YEAR - Basis of dental and faciomaxillary radiology

Winter semester – 30 hours including:

10 hours of lectures

20 hours of workshops

Methods of Teaching and Learning

The forms of teaching are:

- Lectures
- Seminars
- Practical workshops

Students learn by reviewing images from a 2000 case archive.

They also perform x rays during activities in the Maxillofacial Surgery Department, Conservative Department, and during dental prosthetics activities. In those departments the pantomographic and intraoral equipment for classical and digital imaging are in use.

Assessment Methods

The radiological course is supplementary to the acquired clinical knowledge. It is ended by diploma examination covering the theoretical part – :

10% from general radiology

30% from dental and faciomaxillary radiology and practical part:

60% radiological activities / including 5% from general radiology/

Strengths

The strength of this programme is the various clinical material including occlusal, bite wing, pantomographic, CT and MR films. They are presented in the form of slides. The coordinator of the course participated in training in various leading Dental Radiology Departments in Poland.

Weaknesses

The Department of Radiology does not possess the equipment for performing pantomographical and intraoral films.

Innovations and Best Practices

Our department is using modern spiral CT equipped with special programme (Dental) for dental diagnostics. Apart from that, the department is equipped with modern MR 1,5 T unit with special dental solenoids that enables precise imaging of maxillofacial structures.

Visitors Comments on Section 12 - Oral Surgery and Oral Radiology

The visitors observed clinical teaching in Oral Surgery in the old facilities and were impressed by the enthusiasm of the staff who delivered the curriculum in difficult circumstances. The move to the new School will help integrate this subject with the other clinical disciplines.

The Department of Maxillofacial Surgery is based in a new hospital and students were exposed to a variety of maxillofacial problems. This is a strong department which successfully combines the education of the dental and medical students and has a good relationship with the Oral Surgery Department.

The Radiology course is biased towards General Radiography. The facilities for Oral Radiography in the new hospital are sufficient at present but problems may arise if there is a significant increase in patient numbers.

Section 13 - Oral Medicine and Oral Pathology

13.1. Oral Medicine

Introduction

Oral Medicine is taught on 4th and 5th year of studies after previous theoretical introduction in courses of Pharmacology, General Pathology and Pathomorphology.

Primary Aims

- to teach diagnostics of dental and oral mucosa diseases (local and oral manifestations of systemic diseases)
- to teach treatment of oral diseases

Main Objectives

- diagnostics of oral mucosa diseases on the basis of history, clinical examination and laboratory findings, immunological, histopathological, cytological, laboratory and local tests
- evaluation of relationship of oral mucosa lesions and systemic diseases
- prophylaxis and treatment planning for medically compromised and with special dental needs patients,
- global and Polish epidemiology of oral mucosa diseases with special attention on oral cancer
- drugs and their application in treatment of all oral diseases

Hours in the Curriculum

Fifth year:

Lectures : 6 hrs,

Seminars: 10 hrs

Clinical training: 15 hrs

Methods of Learning

- Lectures – theoretical knowledge of diagnosis and treatment of oral mucosa diseases.
- Clinical exercises – 4-5 students (one group) treat patients .Every student does it individually under a supervision of teacher.
- Seminars – discussion between specialists and students on given earlier subject . Differentiation and treatment of the diseases. Additional illustration of cases with slides.

Assessment Methods

Continuous check of the knowledge in classes. Final exam practical and theoretical together with conservative dentistry.

Strengths

Possibility of consultation of difficult cases with a specialist

Weaknesses

Difficulty of demonstrating of acute cases in classes. To small number of clinical hours.

Innovations and Best Practices

Cooperation with Clinics of Dermatology and Haematology.

14.2. Oral Pathology

Introduction

Physiology and pathology of oral cavity is taught in the first years of studies. It is introduced practically on the 4th and 5th year.

Primary Aims

- teaching of oral diseases pathology.
- recognizing and differentiation of oral diseases in clinic.

Main Objectives

- pathology of bacterial and fungal infections in oral cavity,
- pathology of viral infections in oral cavity,
- pathology of pigmental lesions in oral cavity
- pathology of salivary glands
- pathologic lesions in oral cavity in dermatoses
- pathology of oral cavity lesions in systemic diseases
- pathology of precancerous lesions and oral cancer
- pathology of dental hard tissues and bone

Hours in the Curriculum

Year 4th: lectures – 4 hrs, classes – 7 hrs

Year 5th: lectures – 6 hrs, seminars – 10 hrs, classes –15 hrs.

Methods of Teaching and Learning

In the first years of studies student learn about laboratory and histochemical, cytological and local tests and their evaluation. This knowledge is applied in the 4th and 5th year in the clinical practice. Patient cases are also presented on slides, and pictures during seminars, lectures and exercises.

Assessment Methods

There is no separate test. Students are continuously assessed on exercises and seminars . The final examination is after the 5th year (practical and oral together with the examination in Conservative Dentistry).

Strengths

Integration of many specialties.

Weaknesses

Lack of laboratory on site

Plans for Future Changes

Gradual introducing of knowledge in pathology is correct.

Visitors Comments on Section 14: Oral Medicine and Oral Pathology

These subjects are taught within Conservative Dentistry and have 15 hours and 22 hours respectively devoted to them. In addition some teaching takes place in General Pathology and Histopathology. Oral Medicine is an important subject in holistic patient care and it is surprising that in a Dental school focusing on a stomatological approach to teaching that there is not a greater emphasis placed on this subject within the Dental Faculty. Oral Pathology is very specialised branch of pathology. The lack of a specialist oral pathologist and oral pathology laboratory could be considered a serious deficiency.

Section 15 – Integrated Patient Care and Dental Emergencies and Special Needs Patients

There is no separate course on this subject. The whole teaching programme is patient orientated, so in all clinical specialities, students are taught the holistic approach to dentistry. They are constantly assessed by teachers during everyday clinical training.

Students are exposed to all dental emergency problems during their studytime. They are prepared for everyday situations which they might meet in general dental practice.

Integrated patient care and dental emergencies are not "separated" from the rest of the courses.

It is one of the major strength, that maintenance care and a recall system in some disciplines (high risk patients, pedodontic and periodontal disease patients) have been implemented.

As weaknesses - there might be some kinds of diseases ("cases") missing, and students should learn about them from books, films or other records. Nevertheless, there are plans in the nearest future to improve the comprehending patient care and dental emergency education

Visitors Report on Section 15 - Integrated Patient Care

Unfortunately due to the delay in equipping the new Dental School it was not possible to see the students in a clinical situation. It is therefore difficult to evaluate the effectiveness of integrated patient care. The new building is departmentalised and this can focus the students approach to treatment to a particular discipline. The building could have included a number of polyclinics in its design and these could stimulate the multidisciplinary approach to patient care.

Section 16 – Behavioural Sciences

16.1. Medical Psychology

Introduction

Personal approach to suffering person is understood to be essential for adequate formation of patient/stomatologist relation and as such vital for appropriate patient management and treatment. Undergraduate students are provided with knowledge basic in this respects and opportunity to develop skills of building up relation with patient including communication. The course is provided in third year of the studies.

Primary Aims

To widen students knowledge on disability and illness as suffering influencing mental life of a person, its life situation and as a factor causing looking for medical help. To influence the students need for developing adequate approach and communication skills.

Main Objectives

A lecture for the whole class covering such topics as:

- Pain as a crucial problem of patient – stomatologist relation. Fear of pain, variations in tolerance of pain, a language of pain, empathy, possibilities of forming and, maintaining relation with patient in spite of his/her fear of pain and sensibility to pain
- Attitudes toward the body. Face and teeth in appearance. Role of motivation for looks in building health promoting behaviour.
- Stomatologist's patient perception. Working on patient's co-operation.
- Psychological aspects of stomatologist's office and waiting room. Role of aesthetics and comfort for patients' well being.
- Physician-patient relation. Maintaining rapport skills. Stages of relation. Basic psychotherapeutic skills. Contract: importance, stages. Confidence.
- Physician's relations with patients in various stages of life. Specificity of relation with children, adolescents, adults, elderly. Patient's feeling of safety and control.
- Reaction to loss. Specificity of loss in relation to stomatological treatment. Working with psychologist. Working with psychiatrist. Specificity of stomatological treatment for people with mental and behavioural disorders.

Hours in the Curriculum

20 hours

Methods of Learning and Teaching

Lecture

Assessment Methods

Students are asked to write a short essays in response to open questions.

Strengths

The course accompanies the first students' contacts with patients.

Weaknesses

The course is strictly theoretical. Does not involve any practical training of skills nor workings through difficulties in relations with patients.

16.2. Ethics & Jurisprudence

Introduction

The course comprises teaching medical ethics/bioethics on the second year of studies. Stomatology students are taught together with medical students.

Primary Aims

- To discuss why medicine has become the first professional ethical code (the Hipocratic code 2500 years ago).
- The understanding of values and virtues as the basic criteria in evaluation of physician activity. What meaning have this criteria in a pluralistic community.
- To bring nearer to the students the benefits and dangers of contemporary scientific achievements in biological sciences related to medicine.

Main Objectives

To stimulate the students to think over their own understanding of the medical profession bearing in mind the beneficency of the patient.

To respect the autonomy of patients expressed in good services, taking into account the consent of treatment.

How to realise good medical practice in accordance with old principles of medicine „do not harm” in relation to contemporary state of art of medical sciences.

Hours in the Curriculum

15 hrs in one semester.

Methods of Learning and Teaching

Lectures and discussions after them.

Assesment Methods

Written essay on a chosen problem presented during lecture and after that discussed.

Strengths

To bring nearer the students to understanding what does it mean „medical profession – a free profession”. The meaning of self controlled responsibility.

Weaknesses

Students are interested in obtaining good results in physiology and biochemistry. Under such circumstances all other subjects are secondary in the ranking list of importance.

16.3. Medical Sociology

Introduction

- (a) The purpose of training in medical sociology is to show supplemental role of sociological theories, concepts and methods in supporting medical knowledge.
- (b) The role of culture and social inequalities in health-related behaviour and illness behaviour as well as in physician (dentist) – patient relationships (communication, instrumental and affective dimentions) and socio-cultural context of medical professional roles and quality of life in patients with dental problems.

Main Objectives

- Relations between sociology and dentistry
- Sociological concepts of health and illness. Oral health as a dimension of general well-being.
- Attitudes and behaviour in health and illness. Traditional prejudice and oral health, seeking dentist help.
- Life style and health status. The role of dentist in health promotion.
- Health-related quality of life (concept, (psychosocial indicators). Functional status , social dependency, social support, social integration and health -related quality of life in patient with chronic oral conditions.
- The social context of physician (dentist) - patient relationships (obligations, expectations). Cultural and social determinants of relation between dentist and patient.
- Social determinants of medical professions roles.. Formal roles and interpersonal relations.

Hours in the Curriculum

Total 30 hours with 2 hours of lectures (introduction) and 28 hours of seminars.

Methods of Learning and Teaching

Discussion in groups based on seminar's topics. Student's presentation based on review of literature of chosen topics.

Assessment Methods

Oral assessment

Strengths

Good didactic materials, own textbooks

Weaknesses

Number of students in group (should be performed in smaller groups).

16.5. Hygiene and Epidemiology

Introduction

Epidemiology is the basic discipline, the findings of which is used by both clinical and preventive medicine. The course provides an introduction to the basic principles and methods of epidemiology. The core study programme for dentistry students deals with the methodology and basic concepts essential for any medical students including the principles of disease causation, the application of epidemiology to prevention of disease and promotion of health and other basic theoretical concepts of epidemiology. This course tends to encourage good individual practice by introducing the concepts of evidence based medicine. It tends also to stimulate a continuing interest in epidemiology as important discipline in modern medicine.

Primary Aims

The aim of the course is explanation the concepts of epidemiology and methodology of epidemiology to dentistry students. Students are taught to resolve specific health problems at the level of population and programming the prevention. Students are instructed to pay more attention to some host factors, which could affect both the onset of the disease and the process of treatment.

Main Objectives

- Definition and scope of the epidemiology. Natural history of diseases. Definition of health and disease. Measuring the occurrence of disease (frequency, rates), incidence, cumulative incidence, and prevalence. Standardization of the rates. Descriptive studies. Making etiologic hypotheses.
- The concept of cause, evidence for causal relationship, types of causal relations, using epidemiology to identify the cause of disease. Observational and experimental epidemiology. Analytical studies: case-controls and cohort research. Randomized control trials. Ethical problems in epidemiological researches. Screening tests (sensitivity and specificity, predictive power). Epidemiology of infectious diseases (etiologic factor, reservoir, modes of transmission an infectious agent). Prevention of the infectious diseases.
- Assessment of the health status in Poland. Life expectancy, mortality, prevalence and incidence of most frequent diseases.
- Viral hepatitis A as an example of epidemic.
- Prospective study: planning, realization and interpretation of the results (example of chronic bronchitis).
- Case-control study: planning, realization and interpretation of the results (example of lung cancer).

- Using randomized controlled trials to assessing an efficiency of prophylaxis (example of periodontal diseases).

Hours in the Curriculum

14 hours

Methods of Learning and Teaching

Lectures – 4 hours

Classes – 10 hours

Assessment Methods

Written examination

Strengths

There is observed increasing role of epidemiology in modern medicine also in dentistry medicine. There are a number of factors contributed to causation. Some factors are essential for development of a disease and some just increase the risk of developing it. This course provides the basic knowledge of playing role mechanisms, and allows for constant progress in knowledge and continuous improvement of patient's treatment.

Weaknesses

The epidemiology course for dentistry students is based mainly on typical diseases for medical students. There are only a few practicals based on dental diseases (e.g. caries). This may be less engaging during classes.

Visitors Comments on Section 16: Behavioural Sciences

The inclusion of behavioural sciences is an important part of any dental course. It is essential that the subjects should include behavioral science relevant to Dentistry. Some integration of the subjects in this section would improve the efficiency of this part of the curriculum.

Section 17 Other subjects

17.1. Informatics and Biometry

Introduction

A basic level of proficiency in the use of personal computers is required. Students are learning Windows, word processing, spreadsheet, and how to utilise the available statistical software packages in connection with lessons on biostatistics. Instructions are given on the use of Internet to obtain on-line medical information. The main concern of the course is the application of statistical tools to analysis of medical data. Emphasis is placed on methods of collection, summarisation and analysis of data. An important part of the course is devoted to hypothesis testing and evaluation on the basis of experimental results. The availability of computers and statistical software packages allows easy calculations but requires a basic understanding of statistical theory to select the appropriate procedure and interpret the results.

Primary Aims

- To teach the student critical computer skills and the use of the Internet to obtain up-to-date medical information

- To equip the student with basic skills in designing, conducting and analysing a clinical trials, medical surveys and epidemiological studies.

Main Objectives

It is expected that each student will demonstrate:

- proficiency in use of personal computers
- the ability to search the Internet for medical information
- an understanding of the principles of quantitative approach
- a basic knowledge of statistical axioms
- the ability to use statistical software packages and interpret the results

Hours in the Curriculum

There are 10 hours of lectures and 30 hours practicals in the computer classroom.

Methods of Learning/Teaching

Basic instructions are given during lectures. Labs are carried out in the computer classroom allowing students to work with their own data sets throughout the course.

Assessment Methods

Students are assessed based on graded projects.

Strengths

Students work on their assignments in the computer classroom and have individual hands-on Internet experience.

Weaknesses

There is substantial variation in computer skills among the students. The small number of hours devoted to computer fundamentals and biostatistics makes it difficult to provide a minimum knowledge and understanding of statistical tools.

Innovations and Best Practices

Changes in the curriculum are now being implemented and a separate computer course will be given to first-year dental students, allowing us to devote more time to teaching biostatistics and more advanced use of computers.

Plans for Future Changes

We plan to develop closer interaction between dental disciplines and the content of our courses. The new location of the Dental School and its computerisation should ensure closer links.

17.2 Latin

Introduction

The course of Latin starts in the 1st semester of the 1st year of medical and dental studies and lasts for two semesters. The knowledge of Latin terminology and basic grammar is indispensable for studying other subjects, such as anatomy, histology, physiology, internal medicine etc. in which the knowledge of both Polish and Latin terms (names of parts of the body, names of diseases etc.) is required. Moreover, in the future medical and dental professional work, the diagnoses should be written in Latin.

Primary Aims

To facilitate understanding and usage of Latin terminology in all fields of medicine.

Main Objectives

The course provides basic rules of Latin grammar as well as basic vocabulary related to anatomy, physiology, symptoms and names of diseases. At the end of the course the students should know:

- Latin and Greek alphabet.
- Pronunciation and stress in Latin.
- Conjugation of verbs in present tense, in active and passive voice. Declination of nouns, adjectives and pronouns.
- Comparison of adjectives and adverbs.
- Basic structure of sentences used in medical language.
- The role of Greek prefixes and suffixes in medical word formation.
- Writing diagnoses, case histories and section reports.
- The main pharmaceutical abbreviations.
- Well-known Latin statements and proverbs.

Hours in the curriculum

Total 60 hrs
Lectures 0 hrs
Classes 60 hrs
Classes – 2 hrs per week.

Method of teaching/learning

Grammar exercises aimed at practical use of grammar in writing correct medical diagnoses.

Assessment Methods

Students are assessed by means of mid-semester tests checking the knowledge of vocabulary and grammar. At the end of each semester, there is a test checking the material of the whole semester. After the course there is an oral examination.

Strengths

The content of the course is well adjusted to the curriculum of medical/dental studies and the requirements of the future profession.

Weaknesses

Insufficient amount of hours to achieve fluency in writing diagnoses and establishing the firm knowledge of the language.

17.3 English (French, German, Russian)

Introduction

The course of English begins in the 1st year (the second semester) and continues throughout the 2nd, 3rd and ends in the mid 4th year (the sixth semester). The courses of other languages (French, German, Russian) begin in the 2nd year and last for two years. The knowledge of English and other languages is indispensable for understanding medical journals, communication with patients and hospital staff during scholarships, conferences, etc., therefore the curriculum is designed to teach specialist language (terminology used in the main branches of dentistry) parallel with the everyday language and grammar.

Primary Aims

- To provide students with the knowledge necessary to cope with all kinds of specialist texts from reading journal articles to writing case reports, curriculum vitae, reference letters, filling in documents and to communicate with patients and professional colleagues.
- To enable students to communicate in everyday situations.

Main Objectives

At graduation students should have an appropriate knowledge of grammar and vocabulary in the scope of:

- The structure and types of sentences; tenses; nouns; adjectives, adverbs, reported speech, conditionals, unreal past, modality, etc.
- The structure of the mouth, dentition, the types and structure of teeth.
- Dental office and its equipment, dental examination, diagnosis and treatment planning.
- Dental specialities and specialists.
- Pathology of the teeth and periodontium.
- Dental caries, cavity preparation, tooth filling.
- Maxillofacial surgery, tooth extraction, mandibular fracture.
- Dental prosthetics, fixed and removable dentures, dental implants. Hygiene of the oral cavity and prophylaxis.
- Everyday language: shopping, travel, education, food, people, customs and traditions, work, recreation and entertainment.

Hours in the Curriculum

English:	Total	180 hrs
	Lectures	0 hrs
	Classes	180 hrs
	1 st year	30 hrs
	2 nd year	60 hrs
	3 rd year	60 hrs
4 th year	30 hrs	
French, German, Russian:	Total	120 hrs
	Lectures	0 hrs
	Classes	120 hrs
	1 st year	0 hrs
	2 nd year	60 hrs
	3 rd year	60 hrs

For all languages, classes – 2 hrs per week.

Methods of learning/teaching

- Reading comprehension
- Listening comprehension
- Writing summaries, case reports
- Simulation of conferences, giving speeches on appointed subjects
- Interviewing patients
- Watching films in original
- Guided discussions

Assessment Methods

Active participation in classes, test after each semester, examination (written and oral) after the completion of the course.

Strengths

English course prolonged to three years (six semesters) therefore the amount of hours is sufficient to teach both medical and everyday language. Access to interesting textbooks and materials.

Weaknesses

Crowded groups. Various level of language knowledge within one group. Insufficient amount of visual aids.

Innovations and Best Practices

The language course is specifically designed to integrate with the dental syllabus.

Plans for future changes

Modernization and expansion of equipment (books, TV sets, audio and video cassettes, etc.)

17.4 History of Medicine and Dentistry

Introduction

The History of Medicine aim of is to integrate medical sciences.
History Medicine course last approximately 30 hours.

Primary Aims

Primary Aim is to give students the knowledge about history of medicine from ancient until present times.

Main Objectives

- Medicine in Primitive Peoples
- Medicine of China
- Medicine in Ancient Egypt
- Medicine of the People of Israel
- The Medicine of Ancient Greece
- Hippocratic Medicine
- Roman Medicine. Celsus and Plynny. Galen.
- Medieval medicine.
- Arabic Medicine. The School of Salerno
- Medieval disease
- Medieval culture
- Universities
- The Renaissance. Vesalius, Paracelsus. Paré
- William Harvey and his times.
- Enlightenment: Boerhaave and his followers
- Doctrinarians: Brown, Mesmer, Hahnemann, Broussais
- Pathologic anatomy and skepticism: Rokitansky
- Anesthesiology: asepsis and antisepsis
- Development of chemotherapy: Ehrlich, Domagk, Fleming.

Hours in the Curriculum

- 30 hours

Methods of Learning/Teaching

Lectures, discussions during seminars, classes in the Museum of the Faculty of Medicine at the Jagiellonian University.

Assessment Methods

Tests, essays on history and philosophy of medicine, exams.

Strengths

Various methods of teaching

Weaknesses

Lack of professional classrooms.

Innovations and Best Practices

Classes in the Museum of the Faculty of Medicine at the Jagiellonian University.

Plans for Future Changes

Audio-visual methods of teaching starting in nearest future, special lectures on history of the dentistry.

Visitors comments on Section 17: Other subjects

The visitors recognised the need for students to improve their knowledge of foreign languages particularly English and to develop computer skills. With increased knowledge of foreign languages and computer skills gained prior to University the time spent teaching them can be reviewed releasing time in a busy curriculum for clinical studies.

Section 18 – Examinations, Assessments and Competences

The assessment is made on the background of preset goals of achievements made known to the student at the start of the studies and at the beginning of every course. There are different methods of assessment including oral and /or written and/or multiple choice tests during the course. The final grade obtained in the examination depends in part on an evaluation of the student's work throughout the course. The grading system is pass/fail in some subjects and according to the scale from 2 (fail) to 5 (very good) in diploma examinations (see sections 5-16 in the Dental Curriculum). There are no external examiners at the examinations.

This year, a self assessment and evaluation programme by students of the faculty has started, but it is too early to discuss the outcome yet.

After graduation, a dentist obtains a temporary registration for a year, during which he accomplishes further vocational training. Then he has to pass a state exam (starting from year 2003) after which he may register and obtain a licence from The Chamber of Physicians, for practicing as a dentist.

Section 19 –Other influences

19.1. Regional Oral Health Needs

Last years in Poland there were a lot of changes. A reform of the health service was introduced in 1999. Regional sickness funds are formed in connection with obligatory system of health insurance. This is

7.5% of everyone's monthly income. Health care standards and some specialistic procedures are covered by it for medical and dental services as well. Not all materials and procedures are insured nationally, so patient has to be additionally insured or pay the additional costs, especially prosthetic services. Individuals and institutions can enter into a contract with Regional Health Service to provide for basic and specialist care under the public insurance system.

The University Stomatological Clinic belongs to Collegium Medicum so patients can be selected for teaching purposes. Patients seek treatment at the University Clinic on their own initiative or referred by general practitioners or from other health centers for specialistic care or consultation. Many of these patients represent a regional shortage of specialist services, and they receive treatment in the postgraduate clinics. The Faculty also attempt to meet needs for advanced treatment as patients are offered for diagnosis, advice or treatment requiring particular competence or interdisciplinary treatment. There are plans to establish a care for special group of children, such as with cleft lip and palate (in the department of orthodontics).

19.2. Evidence Based Treatment

The Faculty recognises the need of implementing the PBL approach to education, but up to the moment there were no possibilities of doing it. Now in new circumstances, some changes in the curriculum are planned.

Nevertheless, students are aware of the need of scientific basis for treatment they are expected to review literature and know the research evidence before setting final treatment plan or starting intervention. Clinical training is based on scientific evidence and internationally accepted methods and materials. There are also student scientific circles which extend their knowledge in the subject.

Section 20 – Student Affairs

20.1. Basic data from Dental Schools

- Average number of dental students qualifying per year : **66**
- Average number of dental students admitted to the first year: **60**
- Length of course in years: **5**
- Is there a separate period of vocational training following graduation as a dentist in your country: **yes a)**
- If yes to d) above, is that organised by the University/Dental School: **no**

20.2. Involvement in Other University Activities

The students elect representatives to the Faculty Council and to various University bodies. The Students Associations organise cultural activities and excursions.

20.3. Recreation and sport. Social life

During the first and second year, students participate in sport activities such as swimming, athletics and indoor sports. Additional activities are organised for those students from other study years, who are interested.

20.4. Student selection procedures

Application procedures for Dental Studies are organised by special Council. The rules are the same for all Medical and Dental Faculties in the country. The deadline for applications is usually mid of May.

Candidates have to sit for on one day national entrance examination. It is given every year in the beginning of June and consists of multiple choice questions in biology and chemistry and is competitive. Those who achieve the highest score are admitted. The whole process is computerised.

20.5. List different postgraduate courses

Postgraduate courses are organised by Studium Podyplomowe CMUJ and are lead by academic staff in all Departments of the Dental Subfaculty. They are of different length (from single days to two weeks) and usually are a part of obligatory training time needed for becoming a specialist . The postgraduate courses are in :

- Periodontics
- Pedodontics
- Prosthetics
- Endodontics
- Orthodontics
- Oral and maxillofacial Surgery

There are also dentists who attend on individual basis taking training in different clinics, required for obtaining a specialist`s degree.

In Collegium Medicum there is a 4 year postgraduate course to award a doctor`s degree (Phd) in dentistry.

20.6. List of different auxilliary/technology/other courses and number who qualify per year

These groups are educated in independent other colleges.

20.7. Brief description of student counseling services in the University

There is a student manned counselling service . The idea is that advanced students can use their experience in guidance of newcomers. The guidance can vary from information about practical subjects to confidential counseling on personal matters.

20.8. Visitors comments to students affairs

Students attending the Dental School of the Collegium Medicum of Jagiellonian University have a high academic standard. Students within Europe have a strong support system to help them deal with any problems that arise, academic or personal during their undergraduate education. This Dental School has no personal tutoring or mentoring system for the students.

Students have an input into the management of the Dental School via representation on the Council of Deans, Faculty Council and Council of the Dental Institute. The students were concerned that they lacked a direct input to the management of the dental school particularly matters relating to thre curriculum..

Section 21 – Research and publications

DEPARTMENT OF CONSERVATIVE DENTISTRY

1997

I.

1. Chomyszyn-Gajewska M.: Choroby przyzębia i zapobieganie im. Mikrobiologia Medycyna, 1997,1(10),29- 31. (Periodontal diseases and their prevention.)
2. Ciepły J. Zaburzenia mineralizacji tkanek twardych zębów u dzieci zamieszkujących rejony o śladowej i optymalnej zawartości fluoru w wodzie pitnej . Przegląd stomatologii Wieku Rozwojowego, 1997,3(19),5-11. (The mineral distruction of hard tissue within teeth of children living in regions with minimal and optimal amounts of fluoride within drinking water.)

3. Ciesielska M., Kaczmarczyk-Stachowska A., Kwapińska H., Fijał D., Gawrzewska B.: Stan uzębienia dzieci sześć- i siedmioletnich zamieszkałych na terenie województwa krakowskiego. Czas. Stomat., 1997,L,8,548-554. (Dental state of 6 and 7 year olds from the Cracow voivodeship.)
4. Fijał D., Kwapińska H.: Kliniczna ocena zastosowania materiału kompozytowego Dyract i Compoglass, Stomat. Klin., 1996-1997, XVII, 91-96. (The clinical evaluation of Dyract and Compoglass.)
5. Gackowska M. Stan jamy ustnej pacjentów po przeszczepie serca. Stomat. Zachow., 1997,11,3638. (Oral cavity in patients after heart transplantation.)
6. Gałęcka-Wanatowicz D., Kołodziej I.: Braki zębowe i potrzeby leczenia protetycznego u pacjentów z chorobami przyzębia w materiale Zakładu Stomatologii Zachowawczej w Krakowie. Stomat. Klin., 1996,-1997,XVII,9,129-135. (Teeth loss and prosthetic needs of the patients with periodontal diseases treated in the clinic of conservative dentistry in Cracow.)
7. Gawrzewska B. Knychalska-Karwan Z., Ciesielska M., Sendur A.: Dynexan w leczeniu chorób błony śluzowej jamy ustnej. Stomat. Klin.,1996,-1997,XVII,7,97-101. (Dynexan in the treatment of oral mucosa diseases.)
8. Jurczak A. Dwuletnia obserwacja występowania próchnicy u dzieci wybranych szkół Krakowa. Przegląd Stomatologii Wieku Rozwojowego, 4-1996/1-1997,(16/17),9-12. (Two years caries observation at children from chosen Cracow schools.)
9. Jurczyński W.: Stan jamy ustnej u dzieci 8-letnich w szkołach dwóch dzielnic Krakowa. Stomat. Klin., 1996-1997,XVII,123-127. (Oral health status of 8-years old children from two schools of Cracow.)
10. Kaczmarczyk-Stachowska A., Ciesielska A., Fijał D., Gawrzewska B., Kwapińska H.: Ocena periodontologicznych potrzeb leczniczych u młodzieży 18-letniej województwa krakowskiego. Czas. Stomat.,1997,L,2,93-97. (Evaluation of periodontal treatment needs in 18 year olds in the Cracow voivodeship.)
11. Kaczmarczyk-Stachowska A., Kwapińska H., Pasternak M., Krawczyk K.: Użytkowanie i zapotrzebowanie na uzupełnienia protetyczne u ludzi w podeszłym wieku z Krakowa i okolic. Protetyka Stomat.,1997,2,36-38. (The using and needing of dentures by the elderly people from Cracow area.)
12. Kęsek B.: Ocena kliniczna zastosowania preparatu Tantum Verde w leczeniu nadżerek i owrzodzeń błony śluzowej jamy ustnej. Stomat. Klin.,1996-1997,XVII,103-106. (The evaluation of Tantum Verde-liquid in therapy of erosions and ulcerations of the oral mucosa.)
13. Knychalska-Karwan Z.: przyczynek do badań nad hydroksyapatytem. Stomat. Zach.,1997,10,19-24. (The contribution to studies on hydroxyapatite.)
14. Knychalska-Karwan Z., Pawlicki R.: Analiza morfologiczna i mikroanalityczna tkanek twardych mlecznych zębów dzieci z zespołem Papillon-Lefe'vre. Czas.Stomat., 1997,L,11,719-725.Wspólnie z Katedrą Histologii. (Morphological examination and microanalysis of the hard tissues in deciduous teeth of children with Papillon-Lefe'vre syndrome.)
15. Knychalska-Karwan Z :Preparat torfowy Tołpa w leczeniu aft przewlekłe nawrotowych i liszaja płaskiego błony śluzowej jamy ustnej. Periodontologia,1997,7,10-16. (Tołpa Peat Preparation (TPP) in the treatment of aphtae chronice recidivae and lichen planus of oral mucosa.)
16. Knychalska-Karwan Z : Preparat torfowy Tołpa (PTT) w leczeniu zapalenia przyzębia. Mag. Stomat.,1997,6,7-14. Tołpa Peat Preparation (TPP) in the treatment of periodontitis.
17. Knychalska-Karwan Z., Pawlicki R.: Ubytki próchnicowe gładkich powierzchni zębów, badania w SEM oraz w mikroanalizatorze rentgenowskim. Stomat. Zachow., 1997,8,9-12. Wspólnie z Katedrą

- Histologii. (The decays of the smooth teeth surfaces. The investigations in SEM and in microanalyser rtg_
18. Kościelniak D., Ciepły J., Fijał D., Kwapińska H.: Ocena szczotki do czyszczenia zębów Super Brush Small. *Stomat. Klin.*, 1996-1997, XVII, 137-141. (Clinical evaluation of toothbrush Super Brush Small.)
 19. Kwapińska H., Kaczmarczyk-Stachowska A., Ciesielska M., Fijał D., Gawrzewska B.: Ocena wyrzynania zębów stałych u dzieci 6-letnich w trzech środowiskach województwa krakowskiego. *Przegląd Stomat. Wieków Rozw.*, 1997, 2, (18), 4-8. (The estimation of permanent teeth eruption of 6-years old children in Cracow population.)
 20. Pasternak M.: Ocena stanu uzębienia za pomocą wskaźnika PUW u ludzi w podeszłym wieku. *Czas. Stomat.*, 1997, L, 5, 310-313. (An assesment of the dentition using the DMF index in the elderly people.)
 21. Pytko-Polończyk J.: Rola epidermalnego czynnika wzrostu i ślinianek w procesie gojenia owrzodzeń błony śluzowej jamy ustnej i żołądka. *Czas. Stomat.*, 1997, L, 9, 579-587. (The role of epidermal growth factor and salivary glands in the healing of oral and gastric mucosal ulcers.)
 22. Wróblewska M.: Pomyślny wynik leczenia złamania korzenia zęba 21 i reimplantacji zęba 11 – opis przypadku. *Stomat. Klin.*, 1996-1997, XVII, 85-89. (The result of succesful treatment tooth root fracture and tooth replantation.)
 23. Zarzecka J.: Składniki mineralne kamienia nazębnego. *Stomat. Klin.*, 1996-1997, XVII, 79-84. (The mineral components of dental calculus.)

1997

II.

24. Ciepły J.: Występowanie próchnicy zębów stałych u dzieci zamieszkujących rejony o optymalnej lub śladowej zawartości fluoru w wodzie. IX Zjazd Sekcji Stomatologii Dziecięcej PTS Łódź, 11-13 września 1997r. (Occurence of dental caries in permanent teeth of children living in regions with optimal and trays fluoride contents in water.)
25. Kaczmarczyk-Stachowska A., Kwapińska H., Ciesielska M., Fijał D., Gawrzewska B.: Ocena periodontologicznych potrzeb leczniczych u dzieci 12 i 7-letnich woj. krakowskiego. IX Zjazd Sekcji Stomatologii Dziecięcej PTS Łódź, 11-13 września 1997r. (Evaluation of the treatment needs at 7 and 12-years old children from Cracow area.)
26. Plichta P.: Ocena penetracji zębiny przez wybrane systemy wiążące w badaniach in vitro. Międzynarodowa Konferencja Sekcji Stomatologii Zachowawczej PTS, Poznań 9-10 czerwca 1997r. (Evaluation of dentine penetration by different bonding agents in vitro.)
27. Pytko-Polończyk J., Karczewska E., Bielański W., Pierzchalski P., Konturek S.J.: Second European Meeting on Pathogenesis and Host Response in Helicobacter Pylori Infections, Galway, Ireland, march 23rd-25th 1997. Surowicze i ślinowe IgG i IgA przeciwciała u polskich pacjentów z infekcją Helicobacter Pylori (HP) w jamie ustnej i w żołądku. (Serum and saliva IgG and IgA antibody in polish patients with Helicobacter pylori (Hp) infection in oral cavity and gastroduodenal disorders.)
28. Pytko-Polończyk J., Kaczmarczyk-Stachowska A., Karczewska E., Bielański W., Konturek S.J.: 6th World Congress on Preventive Dentistry, Cape Town, South Africa, 8-11 october 1997. Jama ustna – stałym rezerwuarem Helicobacter pylori i potencjalnym źródłem reinfekcji u pacjentów z problemami gastrycznymi. (Oral cavity – a permanent reservoir of Helicobacter pylori and potential source of reinfection in gastroduodenal disorders.)
29. Pytko-Polończyk J., Karczewska E., Bielański W., Pierzchalski P., Konturek S.J.: European Helicobacter pylori Study Group. Xth International Workshop on Gastroduodenal Pathology and Helicobacter pylori, Lisbon, Portugal, 12-14 September 1997. Przeciwciała IgG i IgA przeciw Helicobacter pylori w surowicy i ślinie u pacjentów z chorobą wrzodową. (IgG and IgA antibodies against Helicobacter pylori in serum and saliva of patients with gastroduodenal diseases.)

30. Pytko-Polończyk J., Karczewska E., Bielański W., Pierzchalski P., Sito E., Konturek S.J., Kaczmarczyk-Stachowska A.: Cracow, Poland, April 25-26, 1997. Surowicze i ślinowe IgG i IgA przeciwciała u polskich pacjentów z infekcją *Helicobacter pylori* w jamie ustnej i w żołądku. (Serum and saliva IgG and IgA antibody in polish patients with *Helicobacter pylori* (Hp) infection in oral cavity and gastroduodenal disorders. Journal of Physiology and Pharmacology. *Helicobacter pylori* infection and gastric pathology.)
31. Zarzecka J.: Występowanie niektórych pierwiastków w kamieniu nazębnym u mieszkańców Krakowa i pracowników Wydziału Wielkopiecowego Huty im. T. Sendzimira. Konferencja Naukowo-Szkoleniowa Sekcji Stomatologii Środowiskowej Polskiego Towarzystwa Stomatologicznego, Legnica, 20-21 czerwca 1997r. (Occurrence of chosen elements in dental calculus of Cracow population and workers of T. Sendzimir steel meel.)

PRACE WSPÓLNE

Pawlicki R., Knychalska-Karwan Z.: Próchnica powierzchni żujących zębów trzonowych. Analiza ilościowa wapnia i fosforu w mikrosondzie rtg. Czas. Stomat., 1997, L, 4, 243-247. Wspólnie z Katedrą Histologii CMUJ. (Caries of occlusal surfaces of molars. Quantitative analysis of calcium and phosphorus content in the X-ray microanalyser.)

Pawlicki R., Knychalska-Karwan Z.: Analiza ilościowa wapnia, fosforu i magnezu w mikrosondzie rentgenowskiej w ubytkach próchnicowych korzenia zęba. Czas. Stomat., 1997, L, 8, 531-535. Wspólnie z katedrą Histologii CMUJ. (Quantitative analysis of calcium, phosphorus and magnesium in root caries using the X-ray microprobe.)

1998

I.

1. Błażewicz M., Chomyszyn – Gajewska M., Paluszkiewicz Cz.: 1998. (w druku) Spektroskopia wibracyjna w badaniach in vitro dotyczących rozpadu kompozytu węglowo – polilaktydowego. (Application of vibrational spectroscopy in the in vitro studies of carbon fiber – polylyctic acid composite degradation. Journal of Molecular Structure.)
2. Chomyszyn – Gajewska M.: Tetracykliny w chorobach przyzębia. Med. Tour Press International, Warszawa, 1998, 144 – 147. (Tetracyclines in periodontal diseases.)
3. Gałecka – Wanatowicz D.: Wszczypty allogenne i alloplastyczne stosowane w leczeniu ubytków kostnych w periodontopatiach. Przegląd piśmiennictwa. Mag. Stomat., 1998, VIII, 10, 34 – 38. (Allogenic and alloplastic implants in bone defects treatment in periodontopathies. Literature review)
4. Kęsek B.: Owrzodzenia neurotroficzne u dzieci. Mag. Stomat., 1998, VIII, 4, 29 – 31. (Children's neurotrophic ulcerations.)
5. Knychalska – Karwan Z., Pawlicki R.: Tkanki twarde zębów w periodontitis juvenile. Badania w mikroskopie optycznym, elektronowym skaningowym oraz w mikroanalizatorze rtg. Mag. Stomat., 1998, VIII, 2, 10 – 13 (wspólnie z Katedrą Histologii). (Hard teeth tissues in periodontitis juvenile. Examinations in optic, scanning electron microscope and microanalyser rtg.)
6. Knychalska – Karwan Z., Pawlicki R.: Morfologia w SEM i pomiary podstawowych składników mineralnych twardych tkanek zęba w pobliżu ubytku próchnicowego w mikrosondzie rtg. Czas. Stomat., 1998, LI, 4 223 – 230 (wspólnie z Katedrą Histologii). (SEM morphology and measurement of basic mineral components of the dental hard tissues in the region of carious cavities using the X – ray microanalyser.)
7. Knychalska – Karwan Z., Kaczmarczyk – Stachowska A., Ślósarczyk A., Stobierska E., Paszkiewicz Z.: Frontiers Med. Biol. Eng., 1998, 8, 4, 239 – 252 (wspólnie z Akademią Górniczą – Hutniczą) Długoletnie wyniki stosowania hydroksyapatytu w leczeniu defektów kostnych przyzębia. (Long – term results of hydroxyapatite application in the treatment of periodontal osseous defects.)
8. Sendur A.: Zawartość magnezu w twardych tkankach zębów. Czas. Stomat., 1998, LI, 12, 785 – 790.

(Magnesium content in the hard dental tissues.)

9. Ślósarczyk A., Knychalska – Karwan Z., Stobierska E., Paszkiewicz Z.: 1998, 4 (1), 172 – 175 (wspólnie z Akademią Górniczo – Hutniczą). Krakowska bioceramika hydroksyapatytowa – dane o preparacie. (Cracow hydroxyapatite ceramics – a product report. Med. Sci. Monit.)

1998

II.

10. Kołodziej I., Majchrzak T., Czerwiński E., Panuszka R.: Analiza obrazu uzyskanego w systemie radiografii cyfrowej Sens – A – Ray 2000 przy wykorzystaniu programu Trabecula. (III Conference on Acoustical Methods and Mechanics in Biomedical Engineering. Zakopane, 23 – 24 April 1998. Digital radiography Sens – A – Ray 2000 image analysis with Trabecula program.)
11. Gałecka – Wanatowicz D.: Zastosowanie ceramiki wapniowo – fosforanowej w leczeniu periodontologicznych kieszonek kostnych. Konferencja nt. postępu w stomatologii. Szczecin, 14 – 16 maja 1998. (Using of calcium – phosphate ceramics in periodontological bone pockets treatment.)
12. Jurczyński W.: Zachowawcze leczenie wędrowki zębów w periodontopatiach. Konferencja nt. postępu w stomatologii. Szczecin, 14 – 16 maja 1998. (Protective treatment of migrated teeth in periodontitis.)
13. Pytko – Polończyk J., Kaczmarczyk – Stachowska A., Konturek S., Bielański W., Karczewska E.: Poziom przeciwciał typu IgG i IgA w ślinie i w surowicy krwi u pacjentów zakażonych *Helicobacter pylori*. Konferencja nt. postępu w stomatologii. Szczecin, 14 – 16 maja 1998 (Serum and saliva IgA and IgG antibodies in patients with *Helicobacter pylori* infection.)
14. Zarzecka J.: Stężenia wybranych pierwiastków w kamieniu nazębnym naddziąsłowym u mieszkańców aglomeracji Krakowa. Konferencja nt. postępu w stomatologii. Szczecin, 14 – 16 maja 1998. (Concentration of choosen elements in supragingival dental calculus in population of Cracow agglomeration.)
15. Płóciennik A.: Indywidualne wkłady ceramiczne jako estetyczne uzupełnienie ubytków tkanek twardych zębów. Gdańskie Sympozjum Naukowe Stomatologów. Gdańsk, 18 – 20 czerwca 1998. (Individual ceramics inlays as an aesthetic complement to defects of hard tissues of teeth.)
16. Chomyszyn – Gajewska M.: 76th General Session. Exhibition of the IADR. Nicea, 24 – 27 June 1998. Kompleksowe leczenie pacjentów z zaawansowanymi chorobami przyzębia. (Complex treatment of patients with advanced periodontitis.)
17. Błażewicz M., Chomyszyn – Gajewska M., Paluszkiwicz Cz.: XXIV European Congress of Molecular Spectroscopy. Praga, sierpień 23 – 28, 1998. Zastosowanie spektroskopii wibracyjnej do badań in vitro nad degradacją kompozytu węglowo – polilaktydowego.# (Application of vibrational spectroscopy in the in vitro studies of the carbon fiber – polylactide composite degradation.)
18. Pytko – Polończyk J., Kaczmarczyk – Stachowska A., Karczewska E., Bielański W., Pierchalski P.: Serum and saliva IgG and IgA antibodies in Polish patients with *Helicobacter pylori* (Hp) infection in oral cavity and gastroduodenal disorders. 2nd EADPH Congress. September 25 – 26, 1998, Santander, Spain. Poziom przeciwciał typu IgA i IgG w ślinie i surowicy u polskich pacjentów zakażonych *Helicobacter pylori* w jamie ustnej i z dolegliwościami w przewodzie pokarmowym.
19. Zarzecka J.: 2nd EADPH Congress. September 25 – 26, 1998, Santander, Spain. Ocena stężeń wybranych pierwiastków w kamieniu nazębnym naddziąsłowym wśród palących i niepalących mieszkańców Krakowa. (Concentrations of choosen elements in supragingival dental calculus of cigarette smoking and non smoking group selected in Cracow.)

III.

20. Knychalska – Karwan Z.: Podstawy Chorób Przyzębia i Błony Śluzowej Jamy Ustnej. Wyd. VII poprawione i uzupełnione, Kraków, 1998.

1999

I.

1. Błażewicz M., Chomyszyn-Gajewska M., Paluszkiewicz Cz.: (Spektroskopia wibracyjna w badaniach in vitro dotyczących rozpadu kompozytu węglowo-polilaktydowego). Journal of Molecular Structure, 1999, 510-524. (Wsp. z AGH w Krakowie). (Application of vibrational spectroscopy in the in vitro studies of carbon fiberpolylactic acid composite degradation.)
2. Darczuk D.: Zmiany w jamie ustnej wywołane napromieniowaniem nowotworów głowy i szyi. Stomat. Współcz., 1999, 6, 1, 23-25. (Changes in the oral cavity due to irradiation of head and neck cancer.)
3. Galecka-Wanatowicz D.: Zastosowanie ceramiki wapniowo-fosforanowej (Beta TCP) w leczeniu periodontologicznych kieszonek kostnych. Obserwacje wstępne. Czas. Stomat., 1999, LII, 2, 94-98. (Beta tricalcium phosphate in the treatment of periodontal infrabony defects. The initial observations.)
4. Jurczyński W.: Leczenie zachowawcze przemieszczonych zębów w peridontopatiach. Stomat. Współcz., 1999, 6, 1, 14-17. (Conservative treatment of migrated teeth in. periodontitis.)
5. S.Kaczmarczyk-Stachowska A., Jurczyński W.: Emdogain w leczeniu kieszonek kostnych. Opis przypadków. Stomat. Współcz. 1999, 2, 27-31. (Emdogain in the treatment of periodontal osseous defects. A case report.)
6. Knychalska-Karwan Z., Kaczmarczyk-Stachowska A., Chomyszyn-Gajewska M., Ciesielska M., Fijał D., Gawrzewska B., Kwapińska H., Sendur A.: Częstość chorób błony śluzowej jamy ustnej w populacji krakowskiej. Czas. Stomat., 1999, LII, 9, 569-575. (The frequency of oral mucosa diseases in the Cracow population.)
7. Knychalska-Karwan Z., Kaczmarczyk-Stachowska A., Fijał D., Gawrzewska B., Kwapińska H., Pasternak M.: Haxyl - żel do czyszczenia zębów w ocenie klinicznej. Mag. Stomat. 1999, 1 1, 1 117. (Haxyl- teeth cleaner gel in clinical evaluation.)
8. Knychalska-Karwan Z., Pawlicki R.: Próchnica zębów mlecznych w obrazie morfologicznym w SEM i mikroanalizy w mikrosondzie rtg. Czas. Stomat., 1999, LII, 1, 8 -13. (Wsp. z Katedrą Histologii CMUJ). (SEM morphology and microanalysis of caries in deciduous teeth.)
9. Knychalska-Karwan Z., Parnaś M., Krawczyk K.: Występowanie elementów śladowych w tkance nowotworowej. Mag. Stomat. , 1999, 7, 17-19 (Wsp. z Sam. Prac. Chir. Stom. CMUJ). (Occurance of trace elements in tumour tissue.)
10. Kołodziej I.: Zastosowanie radiografii cyfrowej w ocenie leczenia endodontycznego. Mag. Stomat. , 1999, 2, 34-37. (The use of digital dental radiography in endodontic treatment evaluation.)
11. Pawlicki R., Knychalska-Karwan Z., Nowopgródzka-Zagórska M., Dragan A.: Ocena w SEM wpływu wiertel diamentowych na powierzchnie szkliwa w zależności od szybkości obrotów wiertarki lub turbiny. Czas. Stomat., 1999, LII, 10, 653-658. (Wsp. z Katedrą Histologii CMUJ i Prac. Mikrosk. Skan. CMUJ). (SEM study of the effects of diamond burs on the enamel surface in relation to rotation speed of micromotor and turbine.)
12. Pawlicki R., Knychalska-Karwan Z., Nowogrodzka-Zagórska M., Dragan A.: Obraz morfologiczny i mikroanalizy szkliwa i zębiny zębów stałych w neutropenii, prawdopodobnie wrodzonej. Czas. Stomat. , 1999, LII, 4, 215-220. (Wsp. z Katedrą Histologii CMUJ i Prac. Mikrosk. Skaning. CMUJ). (The morphology and microanalysis of enamel and dentine of permanent teeth in neutropenia, probably congenital.)
13. Pawlicki R., Knychalska-Karwan Z., Nowogrodzka-Zagórska M., Dragan A.: Ultrastruktura i mikroanaliza ubytków klinowych zębów. Czas. Stomat., 1999, LII, 1 1, 718-723. (Wsp. z Katedrą Histologii CMUJ i Prac. Mikrosk. Skaning. CMUJ).

14. Pytko-Polończyk J., Kaczmarczyk-Stachow~ska A., Karczewska E., Bielański W., Konturek S.J.: Eradykacja *Helicobacter pylori* z jamy ustnej i żołądka u pacjentów z chorobą wrzodową. *Mag. Stomat.* 1999, 4, 10-14. (Wsp. z Inst. Fizjol. Klin. CMUJ). (Eradication of *Helicobacter pylori* from oral cavity and stomach in patients with ulcer disease.)

1999

II.

15. Chomyszyn-Gajewska M., Czajkowska B., Błażewicz M.: Odpowiedź in vitro makrofagów na kompozyt węglowolaktydowy. IX Kongres Stomatologów Polskich, Warszawa 1999, 42. (Wsp. z Kat. Immun. CMUJ i Zakł. Ceram. Spec. AGH). (In vitro response of macrophages to carbon-polilactide coposite.)
16. Chomyszyn-Gajewska M.: Antybiotykoterapia czy chirurgia? *Ibidem*, 69. (Systemic antibiotics of surgery in treatment of periodontitis?)
17. Chomyszyn-Gajewska M., Pamuła E., Błażewicz M.: (Ocena nowego materiału do leczenia periodontopatii). 35-th Annual Meeting of the Vontinental European Division of the International Association for Dental Research, Montpellier, 1999, 73,123. (Wsp. z AGH). (Evaluation of new material for treatment of periodontitis.)
18. Ciesielska M., Kaczmarczyk-Stachowska A., Fijak D., Kwapińska H., Gawrzewska B.: Stan zdrowotny uzębienia stałego u dzieci 12-letnich z terenu województwa krakowskiego. Zjazd Sekcji Dziecięcej PTS, Łódź, 1999, .21. (Dental healt status of permanent teeth of 12-year old children from the Cracow Voivodship.)
19. Czerwiński E., Kolodziej I., Majchrzak T.: Ocena struktury wewnętrznej tkanki kostnej zuchwy u kobiet w grupach wiekowych. X Sympozjum Polskiego Towarzystwa Osteoporozy, IV Krakowskie Sympozjum Osteoporozy, Kraków 1999, 24--?4G. (Wsp. z Kliniką Ortop. CMUJ i Pracownią Akustyki Struk. i Mat. Inteligentnych AGH). (Evaluation of inner structure of yaw in women in a different age groups.)
20. Jurczyński .: (Zastosowanie lasera w leczeniu głębokich kieszonek dziąsłowych badanie mikrobiologiczne). 7-th Meeting of the International Academy of Peridontology, Ljubljana, 1999, 38. (Application of a laser in the treatment of deep gingival pockets - microbiological study.)
21. Jurczyński W.: Opis dwóch przypadków resorpcji wewnętrznej zębów i ich leczenie. IX Kongres Stomatologów Polskich, Warszawa, 1999, 10. (Descrip tion of two cases of dental internal resorption and their treatment.)
22. Kaczmarczyk- Stachowska., Jurczyński W.: Zastosowanie Kliniczne Emdogain w kieszonkach kostnych. *Ibidem*,66. (The clinical use of Emdogain in periodontal bone defects treatment.)
23. Kaczmarczyk-Stachowska A., Jurczyński W., Plichta P.: Szynowanie zębów w periodontopatiach metodą Fiber- Splint obserwacje długoletnie. *Ibidem*, 70. (Teeth splinting in periodontal diseases Fiber-Splint method - long term results.)
24. Kaczmarczyk-Stachowska A., Gackowska M., Gołda T.: Zastosowanie preparatu Kernosan w leczeniu schorzeń przyzębia. *Ibidem*, 71. (The clinical use of Kernosan in periodontal treatment.)
25. Kaczmarczyk- Stachowska A., Ciesielska M., Fijał D., Kwapińska H., Gawrzewska B.: Ocena porównaweza stanu i potrzeb leczniczych przyzębia u 12-letnich dzieci województwa krakowskiego. Zjazd Sekcji Dziecięcej PTS, Łódź, 1999, 69. (Evaluation of oral heath status and periodontal needsings of 12-year old children from Cracow area.)
26. Kęsek B.: Ocena kliniczna i cytologiczna zmian w jamie ustnej u pacjentów dializowanych. IX Kongres Stomatologów Polskich, Warszawa, 1999, 99. (The clinical and cytological evaluation of the changes in oral cavity in dialysed patiens.)

27. Knychalska-Karwan Z., Pawlicki R., Kaczmarczyk-Stachowska A.: Zawartość ołowiu w szkliwie i zębinie - wyniki badań w mikroanalizatorze rtg. Konferencja Naukowo-Szkoleniowa Sekcji Stomat. Środowisk. PTS, Polanica Zdrój, 1999, 16. (Wsp. z Kat. Histologii CMUJ).
(Lead content in enamel and dentine - results of eYaminations in microprobe rtg.)
28. Kołodziej I., Majchrzak T., Czerwiński E.: Porównanie struktury wewnętrznej tkanki kostnej żuchwy u kobiet ze zdrowym przyzęciem. IX Kongres Stomat. Polsk., Warszawa, 1999, (Wsp. z Prac. Akustyki Struk. i Mat. Inteligentnych AGH i Klin. Ortop. CMUJ). (Comparison of inner structure of yaw in women with healthy periodontium.)
29. Majchrzak T., Kołodziej I., Czerwiński E., Panuszka R.: Komputerowa analiza struktury tkanki kostnej żuchwy u kobiet ze zdrowym przyzęciem. Konferencja - Akustyka Strukturalna i Mechanika w Inżynierii Biomedycznej, Zakopane, 1999, 87-92. (Wsp. z Prac. Akusr. Stnik. i Materiałów Inteligentnych AGH i Klin. Ortop. Szpit. Uniwersyt.).
(The computer analysis of mandible bone structure in women with healthy periodontium.)
30. Pamula E., Błazewicz M., Chomyszyn-Gajewska M.: (Wpływ sterylizacji na kompozyt biodegralny do kontrolowanej regeneracji tkanek). European Congress on Advanced Materials and Processes, Monachium, 1999, 52. (Wsp. z AGH). (Effects of sterilisation on biodegradable composite material for controlled tissue regeneration.)
31. Pamula E., Błazewicz M., Chomyszyn-Gajewska M.: Polimerowo-węglowy kompozyt dla sterowanej regeneracji tkanek. International Conference of Biomaterials, Kraków, 1999. (Wsp. z AGH).
(Carbon-polymer composite for guided tissue regeneration.)
32. Płóciennik A.: Leczenie zachowawcze rozległych zmian okolowierzchołkowych na podstawie przypadków własnych. IX Kongres Stomatologów Polskich, Warszawa 1999, 7. (Conservative treatment of extensive periapical changes - own cases.)
33. Pytko-Polończyk J., szlachcic A., Śliwowski Z., Karczewska E., Bielański W., Konturek S.J.: (Eradykacja Helicobacter pylori a trądzik różowaty). Internatoinal Symposium Extragastrroduodenal Manifestations of H. Pylori Infection, Kraków, 1999, 37. (Wsp. z Kat. Fizjol. CMUJ). (Eradication of Helicobacter pylori and rosacea.)
34. Pytko-Polończyk J., Szlachcic A., Śliwowski Z., Karczewska E., Bielański W., Konturek S. J.: (Infekcja Helicobacter pylori w trądziku różowatym) European Helicobacter pylori Study Group, XII-th Internacjonal Workshop on Gastroduodenal Pathology and Helicobacter pylori, Helsinki, 1999, 12/OS (Wsp. z Kat. Fizjologii CMUJ).(Helicobacter pylori (HP) infection in rosacea.)
35. Zarzecka J.: Znamię gąbczste białe - opis przypadków. IX Kongres Stomat. Polskich. Warszawa, 1999, 101. (White Sponge Naevus - description of the cases.)
36. Knychalska-Karwan Z.: Stomatologia zachowawcza wieku rozwojowego. Wyd. VII, Wyd. UJ, 1999, Kraków. (Conservative dentistry of developmental age.)

DEPARTMENT OF STOMATOLOGICAL PROPEDEUTICS SPIS PUBLIKACJI W LATACH 1997-1999

1997

I.

1. Krupiński J.: Wskazania do stosowania materiałów szklano- jonomerowych, łączących i złożonych, techniki zakładania i efekty kliniczne. Cz. I. Stomat. Współcz., 1997, suppl. 4, 2, 48-50.
(Indications for use of glass-ionomeric uniting and compound materials, founding techniques and clinical effects. Part I.)
2. Krupiński J.: Wskazania do stosowania metariałów szklano- jonomerowych, łączących i złożonych, techniki zakładania i efekty kliniczne. Cz. II. Stomat. Współcz., 1997, 4, 388-390.
(Indications for the use of glass-ionomeric uniting and compound materials, founding techniques and clinical effects. Part II.)

3. Modelska D.: Terapia kolagenowa przy pomocy implantów Zyderm i Zyplast produkcji Collagen Corporation. Stomat., Klin., 1996-1997, 17, 51-55. (Collagen therapy based on the products of Collagen Corporation-Zyderm and Zyplast implants.)
4. Modelska D., Kardaś I.: Testy diagnostyczne stosowane w obwodowym porażeniu nerwu twarzowego. Ibidem, 57-61. Wsp. ze Świętokrzyskim Centrum Onkologii w Kielcach. (Diagnostic tests used in distal paralysis of the facial nerve.)
5. Modelska D., Milewski G.: Zastosowanie ćwieków okołomiazgowych w odbudowie koron zębów przednich - analiza kliniczna i wytrzymałościowa. Ibidem, 107-115. Wsp. z Politechniką Krakowską. (Application of dentin pins in reconstruction of anterior teeth crowns-clinical and strenght study.)
6. Modelska D., Milewski G : Stopy z pamięcią kształtu jako materiał konstrukcyjny implantów. Ibidem , 117-121. Wsp. z Politechniką Krakowską. (The shape - memory alloys as a constructional material for implants.)

1997

II.

7. Krempa M., Modelska D., Krempa A.: Ocena in vitro przecieków okołowierzchołkowych materiałów do wypełniania kanałów korzeniowych zawierających Ca(OH)₂. Międzynarod. Konf. Sekcji Stomat. Zach. PTS, Profilaktyka i biomateriały w stomatologii", Poznań, 1997, 124-125. (In vitro evaluation of periapical leakage of root canal filling materials containing ~ CA(OH)₂.)
8. Kutrzeba B., Kuilig A., Krupińska A.: Wpływ lakowania,brózd preparatem Helioseal F na redukcję próchnicy (doniesienie wstępne). Ibidem, 52-53. (Influence of sulcus sealing with Helioseal F on decay reduction - preliminary communication.)

1998

I.

1. Krempa M.,Modelska D.,Krempa A.: Materiały do wypełniania kanałów korzeniowych , ocena in vitro szczelności wypełnień. III Konf. Biomateriały i mechanika w stomatologii. Politechnika Śląska,Kat.i Zakł. Stomat. Zach.i Chorób Przyzębia Śląskiej Akademii Medycznej , Kat.i Zakł.Protetyki Stomat. Śląskiej Akademii Medycznej,Oddz.Katowicki PTS,Ustroń, 8-11. 10.1998r. (Root canal obturation,apical leakage.)
2. Wilson N.H.F.: (Kiedy i jakimi materiałami należy wypełniać ubytki spowodowane próchnicą wtórną ?) Konf. Stomat.,Zakł. Propedeutyki Stomat. Zach.CM UJ w Krakowie. Kraków 05.10.1998,doc.dr hab. Jerzy Krupiński. (When should we restore lesions of secondary caries and with what materials ?)

1999

I.

1. Krupiński J.,Krupińska A., Słowik J. : Inerty -nowa metoda wypełniania ubytków kompozytami. Stomat. Współ, 1999,4,20-23. (Inserts – a new method of filling cavities using composites.)
2. Krupiński J., Krupińska A.,Słowik J.,Michalik K.,Gregorczyk-Maga I.,Lipińska A.,Żarow M.,Gandurska M.,Geroch E.: Ocena zgodności pomiarów długości kanałów korzeniowych aparatami APIT i Wskaźnik Apexu oraz metodą radiologiczną.Quintessence , 1999,7,357-360. (The assessmentof the agreement of root canal lenght measurment by APIT apparatus , Apex indicator and radiological methods.)
3. Krupiński J.,Żarow M.: Liszaj płaski jamy ustnej-etipatogeneza, obraz kliniczny, metody leczenia. Mag. Stomat,1999,10, 41-46. (The Oral Lichen Planus -etiopathogenesis, clinical picture and methods of treatment.)

4. Krupiński J., Żarow M., Gończowski K., Dyląg M.: Laboratoryjna ocena szczelności brzeżnej wypełnień z materiałów złożonych wykonanych metodą konwencjonalną i zmodyfikowaną. *Stomat. Wspól.* 1999, 6, 51-56. (A laboratory evaluation of marginal seal of conventional and modified restorations.)
5. S. Michalik K., Bort A.: Etiologia i leczenie Stomatitis prothetica mycotica. *Mag. Stomat.* 1999, 8, 32-35. (The aetiology and the treatment of Stomatitis prothetica mycotica.)

1999

II.

6. Krupiński J., Krupińska A., Słowik J.: (Inserty-nowa metoda wypełniania ubytków materiałami kompozytowymi). 35 th Annual Meeting of the Continental European Division of the International Association for Dental Research. France Montpellier 23-25 september 1999. (Indirect/direct/inserts-a new method of filling cavities by composites.)
7. Krupiński J., Krupińska A., Słowik J.: Indirect/direct/inserts-nowa metoda wypełniania ubytków kompozytami /doniesienie wstępne/. IX Kongres Stomatologów Polskich .Warszawa 8-10 kwietnia 1999. (Indirect/direct/inserts-a new method of filling cavities with composites materials -first report.)
8. Krupiński J., Słowik J., Gandurska M., Gregorczyk-Maga I., Lipińska A., Michalik K., Żarow M.: Ocena zgodności pomiarów długości kanałów korzeniowych wyznaczonych metodą radiologiczną i metodami elektronicznymi. IX Kongres Stomatologów Polskich .Warszawa 8-10 kwietnia 1999. (Evaluation of usability of various endodontic instruments for obtaining optimal shape of apical box.)
9. Krupiński J., Słowik J., Gandurska M., Maga I., Lipińska A., Michalik K., Żarow M., Geroch E.: (Ocena zgodności pomiarów długości kanałów korzeniowych wyznaczonych metodą radiologiczną i metodami elektronicznymi). 35 Annual Meeting of the Continental European Division of the International Association for Dental Research. France Montpellier 23-25 september 1999. (The assessment of the agreement of root canal measurement by the radiological and the electronic methods).
10. Krupiński J., Żarow M., Dyląg M., Gończowski K.: (Ocena szczelności brzeżnej wypełnień z materiałów złożonych wykonanych metodą tradycyjną i zmodyfikowaną). 35 Annual Meeting of the Continental European Division of the International Association for Dental Research. France Montpellier 23-25 september 1999. (The assessment of marginal microleakage of composite fillings made in traditional and modified method).

DEPARTMENT OF ORTHODONTICS SPIS PUBLIKACJI W LATACH 1997-1999

1997

1. Dyras M. Profesor dr hab. Kazimierz Dominik (1907 – 1996) – obituary, *Stom. Klin.*, 1996 – 1997, 17, 5-7. Professor K. Dominik – obituary
2. Dyras M., Wszolek M. Zastosowanie metod rozpoznawania obrazów i techniki sieci neuronowych w automatycznej ocenie sygnału mowy u dzieci z wadami zgryzu leczonymi różnymi aparatami ortodontycznymi, *Mechanika*, 1997, 16, 1, 55 – 66. (The application of pattern recognition methods and neural networks for automatic evaluation of speech signal of children with occlusion defects treated with various orthodontic appliances).
3. Konty-Gibińska W. Profilaktyka i wczesne leczenie ortodontyczne w wybranych żłobkach miasta Krakowa, *I Zjazd Pol. Tow. Ortodontycznego*, Lublin, 1997, 33-34. (Prophylactic and early orthodontic treatment in chosen day nurseries in Kraków).
4. Konty-Gibińska W. Skuteczność wczesnego leczenia ortodontycznego w wybranych przedszkolach miasta Krakowa w okresie 2 lat, *Ibidem*, 34. (Efficiency of early orthodontic treatment in chosen kindergarten, in Kraków over two years).

5. Stós W., Stós B. Stomatologiczne, zespołowe leczenie patologicznych diastem u pacjentów dorosłych, Stom. Klin., 1996 – 1997, 17, 63-69. (The complex surgery, orthodontic and prosthetic treatment of diastema in adults).

1998

1. Dyras M., Konty-Gibińska W.: Stan uzębienia u dzieci w wieku przedszkolnym na podstawie wybranych przedszkoli miasta Krakowa. XXV Sympozjum Sekcji Ortopedii Szczękowej (Ortodoncji) Polskiego Towarzystwa Stomatologicznego , 17-19 wrzesień 1998, 59.
2. Dyras M., Konty-Gibińska W.: Współpraca ortodontyczna z młodzieżą niedośćszą. Ibidem, 60.
3. Dyras M., Zalewska A.: Ocena świadomości zdrowotnej przyszłych matek dotycząca zapobiegania wad zgryzu Ibidem , 63.
4. Dyras M., Stós W., Majewski P., Romankiewicz P.: Własne doświadczenia w zespołowym leczeniu chirurgiczno-szczękowo-ortopedycznym zatrzymanych kłów. Ibidem , 24.
5. Dyras M., Jankowska K., Kalukin J.: Schorzenia górnych dróg oddechowych i wady zgryzu u dzieci miasta Krakowa. Ibidem , 62.
6. Kalukin J., Dyras M.: Utrata górnych przyśrodkowych siekaczy spowodowana ściąganiem diastemy. Ibidem , 61.

1999

1. Bartkowski S., Dyras M., Konty-Gibińska W., Panaś M., Wyszynska –Pawelec G. Aspekt psychologiczny operacyjnego leczenia progenii. 2 Kongres Polskiego Towarzystwa Chirurgii Jamy Ustnej i Szczękowo-Twarzowej, Kraków, 20-22 maja 1999, plakat 67, str. 214.
2. Dyras M., Konty-Gibińska W., Miszczyk- Kargol B.: Analiza sygnału mowy za pomocą sonografu Kay u pacjentów z obustronnym rozszczepem wargi i podniebienia. 2 Kongres Polskiego Towarzystwa Chirurgii Jamy Ustnej i Szczękowo-Twarzowej, Kraków, 20-22 maja 1999, plakat 66, str. 212.
3. Dyras M. Konty-Gibińska W. , Miszczyk – Kargol B. Odległe wyniki analizy sygnału mowy u pacjentów z rozszczepami podniebienia. IX Kongres Stomatologów Polskich , Warszawa , 8 – 10 kwietnia 1999, plakat 100.
4. Dyras M., Zalewska A., Dyras P. Stan jamy ustnej u pacjentów ze schyłkową niewydolnością nerek. IX Kongres Stomatologów Polskich , Warszawa , 8 – 10 kwietnia 1999, plakat 98.
5. Dyras M., Kapera P., Konty-Gibińska W. Zalewska A. Zastosowanie wyciągu zewnątrzustnego w przypadkach stłoczenia wtórnego w szczęce. IX Kongres Stomatologów Polskich, Warszawa, 8-10 kwietnia 1999, plakat 99.
6. Siegel R., Dyras M. Ocena skuteczności instruktażu higieny jamy ustnej na podstawie wskaźnika barwnego. IX Kongres Stomatologów Polskich , Warszawa , 8 – 10 kwietnia 1999, plakat 130.
7. Woliński W., Kalukin J. Leczenie dotylnych wad zgryzu aparatami ruchomymi. Czasopismo Stomatologiczne, 1999, LII, 8 , 538-544. (Removable orthodontic appliances in the treatment of class II malocclusion).

DEPARTMENT OF PROSTHETICS SPIS PUBLIKACJI W LATACH 1997-1999

1997

I.

1. Chowaniec A., Postolko A.: Wytyczne w zakresie dezynfekcji i sterylizacji w specjalistycznym gabinecie protetyki stomatologicznej. Prot. Stom., 1997, XLVII,3, 160-163. (The directives in disinfection and sterylisation at the dental prosthetic surgery).
2. Chowaniec A., Wieczorek A., Horodyska-Gedzar E.: Postępowanie lecznicze u wybranej grupy pacjentów z zaburzeniami czynnościowymi - doniesienie wstępne. Prot. Stom., 1997, XLVII,4, 233-235. (The prosthetic therapy of patients with craniomandibular disorders - preliminary communication).
3. Koralewski M., Wieczorek A., Horodyska-Gedzar E.: Porównawcza ocena pacjentów z zaburzeniami czynnościowymi układu stomatognatycznego na podstawie wybranych testów psychologicznych. Ibidem, 225-227. (Comparitive evaluation of patients with craniomandibular disorders based on psychological tests).
4. Loster B.W., Steczko W.:Overdentures na zatraskach korzeniowych - doświadczenia własne. Prot. Stom.,1997,XLVII,2,83-88. (Overdentures on stud attachments - the own experinces.)
5. Majewski S.W.: Wytyczne laboratoryjno-klinicznej współpracy lekarza i technika dentystycznego. Tech. Dent. nr 1/97,9-10. (Principles of relationslup between dentist and technician.)
6. Majewski S.W., Majewski P.: Enostaj titaniaj dentaj enplantajoj en protetika kuracado. MIR,17-a Volumo, N-ro 4,(69)-97,120-128. Ocena dentystycznych wszczepów tytanowych w leczeniu protetycznym.
7. Stós B., Chowaniec A.: Protetyczna rehabilitacja pacjentów dorosłych po rozszczepach podniebienia pierwotnego i wtórnego. Prot. Stom. 1997,XLVII,4,221-224. (The prosthetic rehabiltion of adult patients after palatoschisis and chiloalveoloschisis).
8. Stós B., Wieczorek A.: Wybrane aspekty kliniczne stosowania koron porcelanowych. Prot. Stom., 1997,XLVII,5,259-263. (Clinical aspects of usina porcelain crowns).
9. Wiśniewska G., Loster B.W., Majewski S.: Metoda zastosowania lasera CO₂ do korekty podłoża protetycznego bezzębnej jamy ustnej. Czas. Stomat., 1997,L,4, 286-290. (Use of CO₂ laser to modify the denture supporting tissue in the endentulous).
10. Wiśniewska G., Majewski S.: Tymczasowe korony i mosty jako element profilaktyki w protetyce stomatologicznej. Mag. Stom., 3/97,17-19. (Temporary crowns and bridges as an prophylactic element in prosthodontic treatment).
11. Wiśniewska G., Loster B.W.: Zabezpieczenie miazgi zęba po zabiegu szlifowania - współczesne materiały i metody. Mag. Stom., 5/97,20-22. (Protection of the tooth pulp after the grinding procedure - materials and methods).

II.

12. Gala A., Pihut M., Zemowski W.: Modelowanie powierzchni zwarciovych zębów metodą nawoskowania w rekonstrukcji zwarcia. XVI Konf. Nauk. Sekcji Prot. Warszawa, 24-26.04.97, P. 32. (Modelling of occlusal teeth sur faces by means of lundeens wax-up technique in occlusion reconstruction).
13. Loster B.W., Bielański W., Karczewska E., Pytko-Polończyk J., Majewski S., Konturek S.: Zakażenie helicobacter pylori w grupie stomatologów.. Dentists II Inter Symp. Helicobacter pyroli infection and gestic phatology Cracov, April 26-26,1997. (Evidence against increased risk of helicobacter pylori (Hp) infection)

14. Steczko W., Postolko A., Chowaniec A.: Zastosowanie zespolenia belkowego w leczeniu pacjentów z brakami między-skrzydłowymi. XVI Konf. Nauk. Sekcji Prot. Warszawa, 24-26.04.1997, P33. (Prosthetic rehabilitation of patients with interdental and wing deficiency with case of bar connector).

III.

15. Majewski S.: Propedeutyka klinicznej i laboratoryjnej protetyki stomatologicznej. Wydaw. Med. Sanmedica, W-wa 1997. Spis konferencji organizowanych przez Katedrę Protetyki :1. III Protetyczna konferencja Studenckich Kół Naukowych. 5.04.97.Przewodniczący Komitetu Organizacyjnego : lek. stom. A. GalaPatronat naukowy : prof. dr hab. S.W. Majewski2. VI Stomatologiczne Sympozjum Szkoleniowe - Zakopane '97 Przewodniczący Komitetu Organizacyjnego : prof. dr hab. S.W. Majewski

1998 r.

1. Czerwiński E., Majewski P., Leń A., Majewski S., Majchrzak T. : Zastosowanie komputerowej analizy radiogramów do oceny tkanki kostnej okołowszczepowej. Annales Academiae Medicae Silesiensis Katowice 1998, Supl. 26, 70-73. (Computerised assessment of radiograms in evaluation of periimplant bone structure).
2. Gala A., Pihut M., Zemowski W.: Rekonstrukcja powierzchni zużywającej protetycznych uzupełnień stałych metodą nawoskowania. Mag. Stom. 5/98, 26. (Reconstruction of occlusal surface of fixed prostheses with use of waxing method) .
3. Loster B.,W., Wiśniewska G., Majewski P. : Ocena preparatu Duropont jako materiału do licowania protez stałych. Mag. Stom. 2/98, 18. (Evaluation of Duropont as a material for fixed prostheses covering).
4. Majewski S.: Problematyka współpracy lekarza z pacjentem w toku leczenia protetycznego. Mag. Stom. 1/98, 35. (Problem of cooperation between physician and patient in prosthetic treatment).
5. Majewski S., Majewski P. : Współczesna implantoprotetyka dentystyczna. Mag. Stom. 12/98, 21. (Contemporary dental implant-prosthetics).
6. Majewski S., Majewski P.: La rekonstruado de incizivoj per aplikado de metodoj pri diploaj enplatajoj, lau sistemo de Bränemark kaj titaniaj sraubojoj memtrancaj de tipo bicortical . MIR 2/98, 56-73.Rekonstrukcja zębów siecznych z zastosowaniem metod implantacji śródkostnej wszczepów systemu Bränemarka i Bicortical.

II.

7. Gala A., Stós B. : Zastosowanie systemu artykulacji SAM w diagnozowaniu i leczeniu trudnych przypadków protetycznych. Materiały Konferencji nt. postępu w stomatologii i XVII Konferencji Naukowej Sekcji Protetyki PTS, Szczecin 1998, 62. Materials of VII Scientific Conference of Prosthetic Department of PTS, Szczecin 1998,62. (The use of SAM articulation system in diagnosis of difficult prosthetic cases).
8. Majewski P., Majewski S.: Możliwości poprawy warunków podłoża kostnego dla wszczepów zębowych za pomocą systemu ukierunkowanej regeneracji tkanki kostnej.Mag. Stom., Supplement, wrzesień 1998,6. (III Kongres Implantologii Zakopane'98). Mag. Stom. Supplement Sept.1998, 7. (III Implantological Congress Zakopane '98). (The possibilities of improvement of bone ground for dental implants by means of Guided Bone Regeneration System).
9. Majewski S., Majewski P.: „Simpler in Practice” - nowa koncepcja zintegrowanego postępowania implantoprotetycznego w systemie Bränemarka. Mag. Stom., Supplement wrzesień 1998, 9. (New way corporation of implantology in Branemark Implant System).
10. Pihut M., Chołociński G.: Metoda rehabilitacji protetycznej pacjentów z patologicznym starciem zębów. Materiały Zjazdowe Konferencji nt. Postępy w stomatologii. (P.46) (Method of prosthetic

rehabilitation of patients with pathological teeth abrasion. Convention materials - Progresses in Dentistry).

11. Steczko W., Postolko A., Wieczorek A.: Odległe wyniki leczenia pacjentów z zastosowaniem zatrząsków korzeniowych systemu Bredent w protezach akrylowych ovd i szkieletowych. Ibidem (P.42). (Long term results of patient treatment with use of root anchors of Bredent System in acrylic over dentures and frame dentures).
12. Wieczorek A., Stós B.: Przypadek zespołowej rehabilitacji pacjentki z progną powikłaną zaburzeniami czynnościowymi układu stomatognatycznego. Ibidem (P. 53). (The case of teamwork rehabilitation of patient with mesiocclusion complicated with dysfunction of stomatognathic system).

III.

13. Wydawnictwa książkowe 13. Majewski S. : Protetyka stałych uzupełnień zębowych. Stomatologiczny Zespół Szkoleniowo-Wydawniczy -Kraków 1998. Stomatologiczny Zespół Szkoleniowo - Wydawniczy Kraków 1998. (Prosthetics of fixed dentures).
14. Majewski S. : Stomatopatie protetyczne - aspekt mikrobiologiczny na podstawie badań własnych. Wydawnictwo Stomatologiczne SZS-W-Kraków 1998. (Prosthetic stomatopathy - microbiological aspects on the basis of own researches).
15. Majewski S. : Biocenoza jamy ustnej w aspekcie protetyki stomatologicznej - badania własne. Wydawnictwo Stomatologiczne SZS-W Kraków 1998. (Biocenosis of oral cavity in dental prosthetics aspects- own researches).

SPIS KONFERENCJI ORGANIZOWANYCH PRZEZ KATEDRĘ PROTETYKI :

1. III Ogólnopolski Kongres Implantologiczny - Zakopane '98 Przewodniczący Komitetu Organizacyjnego : prof. dr hab. med. S.W. Majewski.
2. Stomatologiczne Sympozjum Szkoleniowe - Zakopane'98 Przewodniczący Komitetu Organizacyjnego : prof. dr hab. med. S.W. Majewski.
3. Sympozjum Szkoleniowe pt. Kryteria wyboru materiałów stosowanych w stomatologii - Kraków 4.04.98. Organizator : Zakład Protetyki Stomatologicznej, Stomatologiczny Zespół Szkoleniowo-Wydawniczy i firmę „Vivadent-Ivoclar” Przewodniczący Komitetu Organizacyjnego : prof. dr hab. med. S.W. Majewski.
4. Sympozjum Szkoleniowe pt. Protetyka protez stałych. 28.05.98 - Kraków, 4.06.98 - Ciechocinek. Organizator : Katedra i Zakład Protetyki Stomatologicznej CM UJ, Zespół Szkoleniowo-Wydawniczy. Przewodniczący Komitetu Organizacyjnego : prof. dr hab. med. S.W. Majewski.
5. Konferencja Naukowa nt. Biokompatybilne uzupełnienia braków zębowych w jamie ustnej. 7.10.98 - Kraków. Organizator : Katedra i Zakład Protetyki Stomatologicznej CM UJ, Zespół Szkoleniowo-Wydawniczy. Przewodniczący Komitetu Organizacyjnego : prof. dr hab. med. S.W. Majewski.

1999 rok

I

1. Chołociński G., Gala A.: Protetyka Stomatologiczna w internecie. Magazyn Stomat. 4/99, 46. (Prosthetic dentistry in Internet).
2. Majewski S., Loster B. W., Majewski P.: Reaktywność tkanek okołowszczepowych na implantowane stopy metali szlachetnych w badaniach eksperymentalnych na zwierzętach. Prot. Stom. 1999, XLVIX, 3, 131. (Tissue reaction around precious metal alloy implants in experimental animals).
3. Majewski S., Pawlicki R., Loster B. W., Majewski P.: Badanie współzależności między postacią kliniczną a obrazem histopatologicznym stomatopatii protetycznych o charakterze zapalenia nieżytowego i przerostowego. Czas. Stomat., 1999, LII, 5, 335. (Investigation of the interrelationship

- between the clinical appearance and histopathological reports of the inflammatory exudative and hyperplastic type of the denture stomatitis).
4. Majewski S.: Projektowanie protez ruchomych w aspekcie profilaktyki chorób przyzębia- wytyczne. *Magazyn Stom.*, 1999, 7, 20. (Design of removable denture in dental prevention of periodontal disease – main factors).
 5. Majewski S.: Wskazania i specyfika stosowania stałych uzupełnień zębowych w przypadkach chorób przyzębia. *Magazyn Stom.*, 1999, 11, 36-41. (Indication and principles of using permanent prostheses in periodontal disease).
 6. Majewski S.: Ogólne zasady postępowania protetycznego w kompleksowym leczeniu periodontopatii. *Magazyn Stom.*, 8/99, 11. (The general principle of prosthetic treatment in periodontal disease).
 7. Majewski S.: Odontogenesis imperfecta hereditaria cum oclusio aspecta – leczenie protetyczne. *Magazyn Stomat.*, 12/99, 46. (Odontogenesis imperfecta hereditaria cum oclusio aspecta – prosthetic treatment).
 8. Majewski S., Wiśniewska G.: Rehabilitacja pacjentów w przypadkach tyłożuchwia czynnościowego. *Magazyn Stomat.*, 4/99, 15. (Prosthetic rehabilitation in adults with functional retrognathia).
 9. Majewski S., Loster B. W., Majewski P.: Dentystyczne stopy metali szlachetnych w warunkach ich dotkankowej implantacji – histochemiczne badania doświadczalne. *Prot. Stom.*, 1999, XLVIX, 3, 123 (Dental precious metal alloys implanted in tissue - histochemical investigations).
 10. Stós B., Gronkiewicz K.: Odbudowa prawidłowych kontaktów zwarciovych u pacjenta dorosłego ze zgryzem częściowym bocznym i laterogenią. *Magazyn Stomat.*, 1999, 9/99, 41. (Reconstruction of proper occlusal contacts in adults with malocclusion).
 11. Stós B., Wieczorek A., Gronkiewicz K., Stós W.: Zastosowanie zatrząsków typu Bredent w rehabilitacji protetycznej trudnych przypadków. *Prot. Stom.*, 1999, XLVIX, 5, 283. (Use of Bredent attachments in the treatment of difficult prosthetic cases).
 12. Wieczorek A., Stós B.: Rehabilitacja zespołowa pacjentów z progenią. *Magazyn Stomat.*, 1999, 5/99, 28. (Multidisciplinary rehabilitation of patient with mesioocclusion).
 13. Wiśniewska G., Majewski S., Loster B. W.: Leczenie stomatopatii protetycznych o charakterze zmian przerostowych z zastosowaniem lasera CO₂. *Magazyn Stomat.*, 1999, 2/99. (Treatment of hyperplasia stomatopathies with using CO₂ laser).
- II.**
14. Chołociński G., Gala A.: Stomatologia w Internecie. Materiały zjazdowe IV Konferencji Internetu Medycznego Toruń 12-13 XI, 1999 r. (Dentistry in Internet).
 15. Czerwiński E, Majchrzak T., Majewski P., Ień A., Majewski S., Panuszka R.: Ocena tkanki kostnej okołowszczepowej na radiogramie z zastosowaniem komputerowej analizy obrazu. Materiały zjazdowe IV Konferencji. (The assesment of periimplant bone structure on the radiograph applied for quantitative analyses).
 16. Gala A., Ryniewicz A.: Ocena tribologicznej właściwości wybranej grupy materiałów stosowanych w wykonawstwie stałych uzupełnień protetycznych. Materiały zjazdowe Kongresu Stomatologicznego, Warszawa 99. (Examining of tribological aspects in selected dental materials group apply suning fixed prosthodontes treatment).
 17. Horodyska E., Sawicki B.: Przypadki zaburzeń czynnościowych układu stomatognatycznego po leczeniu ortodontycznym. Materiały Seminarium Naukowego Katedry i Koła Sekcji Protetyki pt.: Protetyka w praktyce klinicznej – Kraków'99. (Cases of temporomandibular disorders after orthodontic treatment).

18. Loster B. W., Bielański W., Karczewska E., Majewski S, Konturek S: Infecto de Helicobacter pulori en grups de dentkuracystoj – enkondukta komunikajo. Materiały zjazdowe XII Międzynarodowej Konferencji IMEK-99.Zakażenie helicobakter pylori w grupie lekarzy stomatologów – doniesienia wstępne. (Infection of Helicobacter pylorii in dentist population – primary report).
19. Loster B. W. Zakażenie helicobacter pylorii w grupie lekarzy stomatologów. Materiały zjazdowe VII Zjazdu Naukowo-Szkoleniowego Lubelskiego Oddziału PTS, Kazimierz n/Wisłą 14,15 05. 1999. (Infection of Helicobacter pylorii in dentist population).
20. Loster B. W.: Nowoczesne urządzenia i mechanizmy służące do utrzymania ruchomych uzupełnień protetycznych. Materiały zjazdowe III Warmińsko-Mazurskiej Konferencji Stomatologicznej Olsztyn 10-13. 05. 1999. (The modern attachments using in removable denture).
21. Loster B. W.: Współczesne metody rekonstrukcji zębów stałych na bazie pozostałych struktur korzeniowych. Materiały Seminarium Naukowego Katedry i Koła Sekcji Protetyki pt.: Protetyka w praktyce klinicznej – Kraków'99. (The modern mehod of teeth building on the rest roots).
22. Majewski S.: Implantoprotetyka jako nowa dziedzina współczesnej praktyki stomatologicznej. Materiały zjazdowe VII Zjazdu Naukowo-Szkoleniowego Lubelskiego Oddziału PTS, Kazimierz n/Wisłą 14,15 05. 1999. (Implantoprosthetic as a new part of modern prosthetic).
23. Majewski S.: Zjawisko osteointegracji jako podstawa współczesnej implantologii zębowej. Materiały zjazdowe III Warmińsko-Mazurskiej Konferencji Stomatologicznej Olsztyn 10-13. 05. 1999. (Osteointegration as a basic the modern implantology).
24. Majewski S.: Najnowsze osiągnięcia w dziedzinie implantologii stomatologicznej. Materiały Konferencji Naukowej PTS w Rzeszowie 21. 10. 1999. (The latest achievment in dentistry implantology).
25. Majewski S., Wiśniewska G., Loster B. W.: Korekta tkanek miękkich jamy ustnej przed stosowaniem protez stomatologicznych. Materiały Sympozjum Naukowo-Szkoleniowego Lasery w Stomatologii, Wrocław – Szklarska Poręba 21-23. X. 1999. (Oral soft tissues corrcition before using dentures).
26. Majewski S., Wiśniewska G.: Rehabilitacja protetyczna pacjentów dorosłych w przypadkach nabytych wad zgryzu. Materiały Seminarium Naukowego Katedry i Koła Sekcji Protetyki pt.: Protetyka w praktyce klinicznej – Kraków'99. (Prosthetic treatment in adult patient with acquired malocclusion).
27. Sawicki B., Doktor R.: Rehabilitacja protetyczna pacjentów z rozległymi ubytkami pooperacyjnymi podniebienia. Materiały Seminarium Naukowego Katedry i Koła Sekcji Protetyki pt.: Protetyka w praktyce klinicznej – Kraków'99. (Prosthetic treatment of patients with extensive postoperative palatal loss).
28. Sawicki B.: Badania porównawcze struktury hydroksyapatytu naturalnego i sztucznego. Materiały Seminarium Naukowego Katedry i Koła Sekcji Protetyki pt.: Protetyka w praktyce klinicznej – Kraków'99. (Comperative analysis natural and artificial hydroxyapatite structure).
29. Stós B., Wieczorek A., Gronkiewicz K., Stós W.: Zastosowanie zatrząsków typu Bredent w rehabilitacji protetycznej trudnych przypadków. Materiały zjazdowe Kongresu Stomatologicznego – Warszawa 99 i Prot. Stom., 1999, XLVIX, 5, 283. (Use of Bredent Attachments in the Treatment of Difficult Prosthetic Cases).
30. Wiśniewska G.: Laserowa metoda korygująca podłoże protetyczne przed zastosowaniem protez zębowych. Materiały zjazdowe VII Zjazdu Naukowo-Szkoleniowego Lubelskiego Oddziału PTS, Kazimierz n/Wisłą 14,15 05. 1999. (Laser matherd of correction denture basis before using dentures)
31. Wiśniewska G.: Przedprotetyczna plastyka tkanek miękkich bezzębnej jamy ustnej wykonana techniką laserową. Materiały zjazdowe III Warmińsko-Mazurskiej Konferencji Stomatologicznej Olsztyn 10-13. 05. 1999. (Laser method in oral soft tissues correction of endotelous patients before using dentures).

32. Wisniewska G., Majewski S., Matraszek H.: Przegląd metod leczenia protetycznego w przypadkach hipodoncji. Materiały Seminarium Naukowego Katedry i Koła Sekcji Protetyki pt.: Protetyka w praktyce klinicznej – Kraków'99. (Review of prosthodontic treatment in hypodontis).
33. Wisniewska G., Majewski S., Loster B. W.: Aplikmetodo de CO₂ lasero por korekti protetikon bazon en sendenta busa karo. Materiały zjazdowe XII Międzynarodowej Konferencji IMEK-99. Przygotowanie bezzębnej jamy ustnej do leczenia protetycznego z zastosowaniem lasera CO₂. (Using CO₂ laser in oral cavity preparing at prosthetic treatment).

III.

34. Majewski S.: Zasady postępowania protetycznego w chorobach przyzębia. Rozdz. w podręczniku: Choroby przyzębia – zapobieganie, diagnostyka, leczenie pod redakcją Z. Jańczuka, PZWL Warszawa 1999. (Periodontal disease – prevention, diagnosis, treatment).
35. Majewski S.: Specyfika stosowania stałych konstrukcji protetycznych w chorobach przyzębia. Rozdz. w podręczniku – Ibidem. (Principles of using permanent protheses in periodontal disease).
36. Majewski S.: Specyfika stosowania protez ruchomych w chorobach przyzębia. Rozdz. w podręczniku – Ibidem. (Principles of using removable protheses in periodontal diseases).
37. Majewski S.: Biocenoza jamy ustnej w aspekcie protetyki. Monografia, Wyd. Stomatologiczne SZS-W, Kraków 1999.
38. Majewski S.: Stomatitis prothetica – etiopatogeneza i leczenie. Monografia. Wyd. Stomatologiczne – SZS-W Kraków, 1999. (Stomatitis prothetica – etiopatogenesis and treatment).
39. Majewski S.: Reakcja tkankowa na materiały protetyczne. Monografia, Wyd. Stomatologiczne SZS-W, Kraków 1999. (Tissue reaction on prosthodontics materials).
40. Majewski S.: Tytanowe wszczepy bikortykalne. Monografia, Wyd. Stomatologiczne 1999. (Using of bicorticalis tytan implants).

SPIS KONFERENCJI ORGANIZOWANYCH PRZEZ KATEDRĘ PROTETYKI :

1. Stomatologiczne Sympozjum Szkoleniowe - Zakopane'99. Przewodniczący Komitetu Organizacyjnego : prof. dr hab. med. S. Majewski

DEPARTMENT OF MAXILLOFACIAL SURGERY SPIS PUBLIKACJI W LATACH 1997-1999

1997 r.

I.

1. Łazarz M., Zapała J.: Przerost mięśni żwaczy - opis pięciu przypadków. Czas. Stomat.,1997, 50, 27-31. (Masseter hypertrophy - a description of five cases).
2. Szuta M., Kuchta K., Zapała J., Bartkowski S.B.: Zastosowanie poduszki tłuszczowej Bichata w chirurgii rekonstrukcyjnej i estetycznej.Ibidem, 817-822. (The buccal fat pad in reconstructive and aesthetic surgery).
3. Zapała J., Fortuna T., Stypułkowska J., Pawlik W., Bartkowski A.: Rozpoznawanie i leczenie gruczolaka wielopostaciowego na podstawie materiału własnego. Ibidem, 351-358. Wsp. z Kat. Rad. (Diagnosis and treatment of pleomorphic adenoma on the basis of analysis of clinical material).
4. Zapała J., Romankiewicz P., Endoskopia w diagnostyce i leczeniu chorób zatoki szczękowej. Stomat. Klin., 1996/97, 17, 33-38. Wsp. z Prac.Chir.Stom. (Endoscopy in diagnosis and treatment of the diseases of maxillary sinus).

1998 r.

II.

1. Bartkowski S. B., Zapała J., Heczko P., Szuta M.: (Promienicze zapalenie kości żuchwy: przegląd 15 przypadków). J. Cranio-Maxillofac. Surg., 1998, 26, 63 – 67. Wsp. z Inst. Mikrob. (Actinomycotic osteomyelitis of the mandible: review of 15 cases).
2. Bartkowski S.B., Zapała J., Wszyńska – Pawelec G.: Postępy w diagnostyce i leczeniu chorych z obrażeniami układu wzrokowego. Okulistyka, 1998, 4, 3 – 6. (Progress in diagnostics and treatment of the patients with injuries of the visual system).
3. Modelska D., Wszyńska G., Zapała J.: Rany kątane twarzy spowodowane przez psy. Metody i wyniki leczenia. Czas. Stomat., 1998, 51, 389 – 393. (Facial wounds caused by dog bite. Treatment methods and results).
4. Wszyńska-Pawelec G., Bartkowski S. B., Zapała J., Krzystkova K. M.: Badania porównawcze wyników operacyjnego leczenia złamania rozprężającego oczodołu u dzieci i dorosłych. Okulistyka, 1998, 4, 29 – 34. Wsp. z Oddz. Leczenia Zeza Krakowskiego Szp. Okulist. (Surgical treatment of blow – out fracture of the orbit. Comparison of obtained results in children and adults).
5. Zapała J., Bartkowski S. B., Kuchta K., Pałka P., Moskała M., Kwiatkowski S., Cichoński J.: Własne doświadczenia w wielospecjalistycznym zaopatrzeniu chorych z obrażeniami twarzowo-czaszkowymi. Czas. Stomat., 1998, 51, 589 – 593. Wsp. z Kl. Neurotraum. (Multidisciplinary management of cranio – cerebral injuries).

1999 r.

III.

6. Bartkowski S. B., Zapała J., Wszyńska – Pawelec G., Krzystkova K.M.: (Zespół Marcusa Gunna: leczenie i wyniki w 19 przypadkach). J. Cranio Maxillofac. Surg., 1999, 27, 25 – 29. Wsp. z Prac. Patofizjol. Widzenia. (Marcus Gunn jaw – winking phenomenon: management and results of treatment in 19 patients).
7. Bartkowski S. B., Zapała J., Szuta M., Podziorny H., Kuchta K.: (Znieczulenie ogólne drogą intubacji tchawiczo – podbródkowej w doświadczeniu własnym). Aesth. Plast. Surg., 1999, 23, 297 – 295. Wsp. z Kat. Anest. i Intens. Terapii. (General anesthesia via tracheosubmental intubation from our own experience).
8. Panaś M., Wszyńska – Pawelec G.:Rhabdomyosarcoma głowy i szyi w materiale własnym. Czas. Stomat., 1999, 52, 175 – 180. Wsp. z Prac. Chir. Stom. (Rhabdomyosarcoma of the head and neck – own experience).
9. Zapała J., Modelska D.:Nerwiakowłókniakowatość twarzy w materiale Kliniki Chirurgii Szcękowo – Twarzowej CM UJ w Krakowie. Ibidem, 321 – 325. (Neurofibromatosis of the face up to date at the Department of the Maxillofacial Surgery UJ in Cracow).

DEPARTMENT OF ORAL SURGERY Spis publikacji w latach 1997-1999

1997-1999

1. Stypułkowska J., Moskała M., Kurek M.:Ciała obce w oczodole drążące do środkowego dołu czaszki z obrażeniami mózgu” Wybrane problemy urazów wewnątrzczaszkowych pod red. J.Wrońskiego Fund.Pol.Przegl.Chir., Wrocław 1997,259-265. Wsp. z Kl.Chir. Szczęk.-Twarz. i Kl. Neurotraum. IN. (Foreign bodies in the orbit penetrating to the middle cranial fossa with injuries of the brain)
2. Zapała J., Fortuna T., Stypułkowska J., Pawlik W., Bartkowski A.: „Rozpoznawanie i leczenie gruczolaka wielopostaciowego na podstawie materiału własnego” Czas.Stomat., 1997,50,351-358. Wsp. z Klin.Chir.Szczęk.-Twarz. i Kl. Radiol. (Diagnosis and treatment of pleomorphic adenoma on the basis of analysis of clinical material).
3. Stypułkowska J., Szuta M.: „Cylindroma - guz śliniankopochodny o podstępnej złośliwości. Przegląd 25 przypadków” Czas.Stomat., 1998,51,463-469. Wsp. z Kl.Chir.Szczęk.-Twarz. (Cylindroma – sialogenic tumor with insidious malignancy. Report of 25 cases).
4. Majewski P.:„Uwarunkowania procesu osteointegracji w implantologii stomatologicznej” Mag.Stomat., 1998,85,32-36. (Conditions of the osseointegration in dental implantology).
5. Panaś M., Müick B.:„Porównanie flory bakteryjnej wyizolowanej w latach 1966-1969 i 1996-1997 z zakażeń zębopochodnych oraz ocena jej wrażliwości na antybiotyki” Czas.Stomat., 1998,51,524-5286. (Comparison of the bacterial flora isolated from infections of dental origin during the years 1966-1969 and 1996-1997 together with their sensitivity to antibiotics).
6. Solska A., Kaczur K., Stypułkowska J.: Jatrogenna martwica kości szczęk wywołana preparatami dewitalizującymi miazgę – problem aktualny jeszcze dziś” Czas.Stomat., 1998,51,271-276. (Iatrogenic osteonecrosis of the jawbones caused by preparations used for pulp devitalisation – still a problem today).
7. Stypułkowska J.:„Nowotwory zębopochodne i zmiany nowotworopodobne kości szczękowych. Studium kliniczne i ocena wyników leczeniaFolia Med.Crac., 1998,39,35-141. .” (Odontogenic tumours and tumour – like lesions of the jaws. Clinical analysis and evaluation of therapeutic results).
8. Żochowski J., Stypułkowska J., Knychalska-Karwan Z.: Perioskalpel” Mag.Stomat., 1998,89,16-18. (The perioscalpel).
9. Zaleska M., Lenik J., Majewski P., Müick B., Panaś M., Romankiewicz P., Solska A., Stypułkowska J.: Ocena porównawcza skuteczności działania wybranych środków znieczulenia miejscowego stosowanych w chirurgii stomatologicznej” Mag.Stomat., 1999,90,29-34. (Comparative study of the efficacy of selected local analgetics used in the oral surgery).
10. Knychalska –Karwan Z., Panaś M., Krawczyk K.: „Występowanie elementów śladowych w tkance nowotworowej” Mag.Stomat., 1999,90,17-19. Wsp. z Zakł.Stomat.Zach. (The occurrence of the vestigial elements in the neoplasmatic tissue)
11. Czerwiński E., Majchrzak T., Majewski P., Leń J., Majewski S., Panuszka R.: Ocena tkanki kostnej okołowszczepowej na radiogramie z zastosowaniem komputerowej analizy obrazu” Cracow, 1999,131-134. Wsp. z Klin. Ortopedii CM UJ Ponadto 2 publikacje przyjęte do druku. Conf. on Structures-Waves-Biomedical engineering. OL. IV- Waves method and mechanics in biomedical engineering. (The evaluation of periimplant bone tissue with computer analysis of radiograms).

Section 22 – Quality Development

The staff and authorities of the Subfaculty of Dentistry are aware not only of the need of constant self-education but also of improvements and changes that should take place in educational curriculum. Now there is the

moment when the circumstances are more or less favourable and gradual implementing of modifications could be done.

The plans concern:

1. further improvement of teaching, preclinical and clinical facilities, modernizing of equipment,
2. introducing self-directed, problem based learning, which should facilitate life-long learning,
3. still more integration of disciplines and comprehensive dental care, which should allow students to benefit more from the curriculum
4. finding better, unified (standardised) methods of assessments and examinations
5. playing more active role in international programs and cooperation, concerning undergraduate and postgraduate education (participation in the Socrates/Erasmus programme)
6. encouraging the academic staff to be more active in quality development,
7. continuing the evaluating of staff and curriculum by students,
8. continuing participation in meetings, seminars and courses nationally and internationally,

The above goals should be achieved by establishing a cooperation with a school committee for didactics with active participation of student representatives..

Also, there would be certain benefit from consultation with European experts on improving the quality of teaching.

Section 23 – Visitors Executive Summary on the School

Introduction

The visitors are grateful to all the staff and students for their enthusiasm and cooperation throughout the visit. The Vice Dean for the Sub-faculty of Dentistry, Professor Maria Chomyszyn-Gajewska, was an excellent host who made herself available throughout the visit. The visitors were pleased to have the opportunity to meet the Vice-Rector of the Medical Faculty and the Rector of the University. Unfortunately, the development of the new Dental School was delayed and the new building was not completed. It was therefore not possible to see clinical activities with the undergraduates in this new facility. All clinical activities with the exception of Oral Surgery were suspended pending the completion of the new building.

23.1. Aims and Objectives

These were well defined in most disciplines. The Stomatological approach to dentistry was evident. However, the teaching in the basic sciences, para-clinical sciences and human diseases were insufficiently aimed at dental students. Closer coordination with clinical dentistry would be helpful.

23.2. Programme Character

Structure and content of the programme

The programme is arranged along traditional lines with clinical dentistry mainly in the final three years. There is an introduction to Conservative Dentistry in year two giving the students an early exposure to dentistry. Medical subjects continue into year five reducing the time available for clinical dentistry.

A number of subjects are taught in combination with the medical students. The course contents are therefore broad and not necessarily applicable to the dental undergraduates. Having two departments responsible for teaching Conservative Dentistry has led to overlap and some confusion in the teaching.

The curriculum of the entire Stomatological Model needs to be reviewed. There is not a formal, systematic and ongoing review of the curriculum. A curriculum committee should be formed in order to conduct the review. Some items that should be examined are as follows:

1. The offerings in the medical and biomedical sciences should be reviewed for their relevance in the development of the fundamental knowledge necessary for graduates to be competent in the delivery of oral health care.
2. The competencies for an entry-level oral health provider should be developed. These competencies must be measurable and should be assessed periodically for achievement.
3. The principle of comprehensive patient care should be developed which would lead to a fully integrated approach of patient care.
4. The hours allocated for patient care should be increased.
5. The sequencing of all courses should be reviewed.
6. Redundancies should be eliminated when appropriate.

A quality assurance program for the clinics should be developed. This program should be used to ensure that the oral health care being delivered is of the highest quality. Some one should be made responsible for the program.

All aspects of the program, teaching, research and service need to be evaluated through an ongoing and systematic outcome assessment plan. The data obtained from the process should be used towards developing changes that will ensure ongoing quality improvement.

The process begins with the development of a mission statement that is understood and accepted by all parties. From this mission statement the institution should develop specific measurable goals for each area. Benchmarks need to be established for each goal followed by the development of instruments e.g. graduate and patient surveys to measure achievement of the stated goals. The results of the data gather may lead to the identification of some problems. The institution would then identify appropriate solutions to be implemented.

A group consisting of the various constituents of the program should be held responsible for assessment. This group should include administrators, junior and senior staff (clinical and research) and students.

Education Approach

Some limited 'self directed' learning access in the course but in general the curriculum is delivered in a traditional subject-based manner with a large didactic component.

Examinations and Assessments

In the time available it was difficult to understand completely the examination system. The students had formative and summative assessments throughout the course. In year 5 the students have the diploma examination which consists of theoretical and practical components.

23.4. Students

General Comments

Students are selected following a national entrance examination. The majority (66%) were female. They were well motivated and the visitors had the opportunity to meet representative of all five years. In the discussions students indicated that they would like an increase in time on clinical subjects and more relevant courses in subjects like anatomy, physiology and biochemistry.

Student Competencies

The programme was not based on the achievement of competencies. The students had experience of a wide range of clinical procedures but in most cases this was limited to time and expense of materials.

23.5. Facilities

The new building is of the highest standard. Unfortunately, not all clinics have been equipped with new Units. The re-equipping will be complete in the next two years. All the facilities for a modern dental hospital have been included. The new hospital was planned ten years ago and the space allocation determined at that time. Opportunities still exist for the development of polyclinics for the practice of comprehensive patient care. The two lecture theatres are of a high standard and the School is well provided for with seminar rooms. There are no research facilities in the School, these remain at the Medical School. There is sufficient space in this large building to have laboratories for some in-house research.

23.6. Staff

The staff student ratio in the dental clinics is good with one member of staff to five/six students. In other areas the group size is too large for small group teaching and student highlighted this as a problem in their education.

Staff are contracted for a set number of teaching hours per year. This is not demanding of their time. However, they have a requirement to undertake hospital practice and private practice. The latter to supplement their modest University salary. All these activities restrict the amount of time available for career development and make prolonged periods of time overseas for study a major problem financially.

Promotion for staff is complicated and staff guidance is particularly important. This was better in some areas than others. A mentoring system for junior staff could help them with their career development.

The visitors met a wide range of staff and were impressed with their enthusiasm and commitment.

23.7. International Perspectives

The School has established a wide range of contacts with the SOCRATES programme enabling students to have an opportunity to study abroad. The staff attend International Conferences, however, the majority have had no experience of working outside Poland and in many cases Krakow. The lack of opportunity to study abroad limits their vision for dental education and the visitors would recommend that opportunities are created for staff to work abroad and see different methods of dental education even for limited periods.

23.8. Research and Publications

The School is active in research with some international collaboration. Very few papers are published in non-Polish journals.

23.9. Administration and Hospital and Infra-Structures

The Dental School is part of the Medical Faculty. The Sub-Dean for Dentistry is Head of School. There was no apparent administrative structure within the School and no formal mechanism for curriculum review. Junior staff and students had little input into the administrative set-up. The Departmental structure was based on traditional lines and had some anomalies.

23.10. Overall Statement

The visitors were impressed with the standard of Dental Education at Jagiellonian University. The new building with modern equipment is a tremendous boost to dental education in Krakow. It is also a unique opportunity to review the programme and the administration set up leading to a more patient centred education. The international link-ups now established will broaden the horizons of the staff and encourage further research. The visitors were pleased to be present at the start of this new era in dental education in Krakow and encourage the Sub-Dean and all the staff to grasp the opportunity and move forward into the 21st century.