Selected Abstracts from the VIth International Congress of Oral Health and Dental Management in the Black Sea Countries, Constanta, Romania – Varna, Bulgaria, May, 2008

1. THE IMPACT OF ORAL HEALTH ON THE QUALITY OF LIFE FOR THE PATIENT WITH PERIODONTAL DISEASE

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The quality of life is determined by both the characteristics of the person and of non-medical factors. The quality of life connected with oral health can be defined as the evaluation of the way that different factors (functional, psychological, social, experience of pain/discomfort) will affect the wellbeing of a person or community. The pain and discomfort given by oral diseases, or their side effects can be more intrusive and more preoccupying than anywhere in the organism, because the oral cavity is central for many quotidian activities. Moreover, due to the role that the oral cavity plays in interpersonal relationships, the own image of the individual, positive or negative about himself and the ramifications associated to this self perception are also indestructibly bonded with the quality of life.

Aims. The purpose of this study was to evaluate the impact that the oral health has on the quality of life in patients with periodontal disease, evaluated through different factors (physical, social, psychological).

Methods*:* The group of study comprised 108 patients, with different forms of periodontal disease, examined and treated in an interval of 12 months. The impact of oral health on the quality of the patient's life was evaluated in a questionnaire adapted after McGrath & Bedi. Besides the recording of the data from the questionnaire, in these patients the examination included also the evaluation of medical, social and dental factors and also the periodontal state, through periodontal probing, evaluation of the level of clinical attachment, evaluation of plaque and bleeding indexes and radiographic exam. It was also recorded the number of teeth with pockets =5 mm, the number of present teeth and the existence of dental bridges/mobile prosthesis.

Results: the impact of oral health on the quality of life in this group of patients had a great importance, almost 90% from the patients mentioning that their oral health had a major impact on the quality of life in one ore several ways. Many patients perceived their conditions of oral health as having effect on their physical state, affecting their comfort 19% as a result of halitosis and with effect on their physical aspect (physiognomy) – 18%. The social impact was also prevalent, 32% reporting a negative effect of oral health on their financial state, others 16% considering that their oral health detered them from laughing or smiling. Also, the psychological influences were prevalent on certain aspects, 15% showing that the periodontal disease was a reason of concern, in 13% the periodontal disease affected the disposition and the state of happiness, others 12% reporting that the periodontal disease affected the self esteem of the patient.

Conclusions: The evaluation of the impact of oral health on the quality of life showed that the periodontal disease has major social, physical, and psychological implications. Moreover, the periodontal state was also associated with the quality of life connected with oral health. This suggests that the generical evaluation of life quality connected with oral health definitely depends on periodontal disease, both in self esteem and also in clinical observations. The concept of life quality connected with oral health constitutes a special contribution in clinical practice, in research and sanitary education.

2. SALIVARY FLUORIDE CONCENTRATION AFTER CONSUMPTION OF FLUORIDATED MILK WITH BREAKFAST

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Aims. Milk fluoridation may be considered for prevention of dental caries. A topical effect of fluoridated milk is likely and it is supposed to keep ionized fluoride (F) at sufficient levels to inhibit demineralization and promote remineralization of enamel. The aim of this study was to compare salivary fluoride concentrations in young adults drinking fluoridated milk during or after breakfast.

Methods. The comparison was performed accord-

ing to the research protocol consisting in five phases in which the subjects consumed: 1) standard breakfast; 2) 200 ml fluoridated milk (5mg F/l); 3) standard breakfast and after two hours 200 ml F-milk; 4) fluoridated milk during breakfast and 5) F-milk with breakfast every morning for a week. Whole saliva was collected immediately (0) and after 15, 60 and 120 minutes. The fluoride was analyzed using F-selective electrode. **Results.** The statistical analysis revealed significant differences between the salivary fluoride concentrations measured at 0, 15, 60 and 120 minutes in different testing phases ($p<0.0001$). The values (mean ± SD, μg) obtained after short-term fluoridated milk and breakfast consumption (0.317±0.308; 0.074±0.063; 0.039±0.012 and 0.028±0.008) were higher than after intake on a single occasion, but no significant differences could be observed ($p>0.05$). **Conclusions.** The results suggest that intake of F-milk contributes to the F-storing process into the oral cavity with elevated F concentrations in saliva. The present study shows that fluoridated milk might be used for fluoride supplementation in young adults. Supported by "The Borrow Foundation" with grant no. 2088/03.03.2006

3. OPPORTUNITIES FOR ORAL HEALTH RESEARCH IN THE BLACK SEA COUNTRIES

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With a series of key decisions, the European Union has given emphasis to strengthening R&D cooperation with neighbouring countries, especially those that may become members of the Union in the near or mid-term future (as it is the case of the Black Sea). The development of **Science and Technology (S&T)** collaboration provides important **opportunities to all sectors of economy** and may serve as a first step to political cooperation within a wider context of European integration. It is now necessary to undertake coherent actions for the reinforcement of the RTD capacity in each country and in the region as a whole. The new 2007-2013 EU programming period focuses much more than in the past on supporting investment in innovation, research and entrepreneurship strategies. A lot of tools can be implemented in order to deal with urgent needs for stronger national strategies which foster RTD development and Innovation, the establishment of new funding instruments, specific support actions and the development of stronger synergies between national RTD programmes and different EU programmes: 7th EU Framework Programme (FP7, with a budget of 54.582 million euro), Competitiveness Innovation Programme (CIP, with a budget of € 3.620 million euro), the Instrument of Pre-accession Assistance (IPA), and other EU programmes where participation of the Black Sea Region is foreseen (e.g. TEMPUS, COST, EUREKA, LIFE+, Erasmus Mundus, Life Long Learning Programme). The table on the right summarises the opportunities available in Black Sea in S&T and Innovation.

Efforts to consolidate the potential of the Black Sea countries and to establish stronger links with the scientific community of the EU were spearheaded by the INCO Programme of the 6th Framework Programme for Science, Technology and Development (2002-2006). This programme was aimed at the Bulgaria, Romania and Turkey as well as eastern ENP partners. The Framework Programme included additional and substantial cooperation with the latter, particularly through the INTAS Programme which focused on cooperation between the EU and Eastern Europe and Central Asia. In September 2005, the Ministers of countries that belong to BSEC adopted a '*BSEC Action Plan on cooperation in science and technology*'. This plan was developed with European help for a 4 years period. It aims at enhancing S&T cooperation among the Black Sea countries as well as between BSEC and the EU. The Commission participates in all S&T Working Group meetings to assist in the implementation of the Action Plan Improving the health of European citizens and increasing the competitiveness and boosting the innovative capacity of European health-related industries and businesses, while addressing global health issues including emerging epidemics. Emphasis will be put on translational research (translation of basic discoveries into clinical applications including scientific validation of experimental results), the development and validation of new therapies, methods for health promotion and prevention including promotion of child health, healthy ageing, and medical technologies, as well as sustainable and efficient health care systems.

The health systems of the EU reflect the overarching values of universality, access to good health care, equity and solidarity, aiming to make provision that is patient-centred and responsive to individual need. The principal target users of new knowledge within the Commission include the Directorate-General for Health and Consumer pro-

tection, the Directorate-General for Employment, Social Affairs and Equal Opportunities, and also the Directorate-General for Development and the Directorate-General for EuropeAid. In particular the research undertaken will generate the scientific evidence to meet the objectives of the proposed new Programme of Community Action in the field of Health (2007-2013).

The principal targeted users outside the Commission include the Member States (Health Ministries and Pubic Health Institutes), the World Health Organization (WHO) (both Headquarters and the Regional Office for Europe), the Organization for Economic Cooperation & Development (OECD) as well as clinicians, service providers, patients and other stakeholders.

Special attention will be given to patient safety, including adverse effects of medication: to identify the best clinical practice; to understand decision making in clinical settings in primary and specialised care; and to foster applications of evidence-based medicine and patient empowerment. Focus will be on the scientific benchmarking of strategies; investigating outcomes of different interventions including medicines, scientifically tested complementary and alternative medicines, and new health therapies and technologies taking into consideration prescription strategies, some aspects of pharmacovigilance evidence, specificities of the patient (e.g. genetic susceptibility, age, gender and adherence) and cost benefits.

The Black Sea countries should furthermore invest in stakeholders clubs and informal and formal networks aimed at:

- Analysing and answering the needs of the public in an approach combining demand and supply elements;
- Increasing public-private partnerships (PPP) both at the strategic planning phase and in the implementation phase through private money leveraging mechanisms;
- Investing in awareness campaigns in order to better inform all potential beneficiaries of the competitive advantages resulting from networking and clustering activities;
- Making coaching and investment readiness schemes available in ?order to ensure that any beneficiary of the support has developed the management capacity allowing him/her to efficiently use the support granted. Regarding applied RTD, activities can be implemented in their areas through:
  - co-financing of research infrastructures and equipments;
  - stimulating partnerships between SMEs and universities or research centres;
  - funding a university-enterprise interface;
  - opening research facilities to SMEs, for instance by providing "consultancy vouchers" to SMEs to buy services from academics and researchers;
  - improving human capacities in universities, research centres and enterprises to be able to produce and use new knowledge which can be transformed into products/services;
  - promoting networking and the creation of a critical mass of competences in the field of applied research and exploitation of research results;
  - supporting research revenue schemes through an integrated approach including a proof of concept element.

Investment could also focus on a regional skill observatory aimed at:

- detecting the future needs of enterprises;
- influencing the vocational training offer to the foreseen skills requirements of the regional vision;
- promoting entrepreneurship education;
- providing eLearning infrastructure and content;
- using the Life Long Learning Programme (especially Leonardo programme) and Interreg IV to support transnational activities and economic intelligence.

Finally, it is worth stressing that successful strategies all have in common: **efficient governance, strong leadership, well-managed support to innovation and research results valorisation**, an offer of added-value support services, strong entrepreneurship culture, and "no nonsense" implementation schemes. This means that the strategy tries to eliminate market failures.

4. NATIONAL SYSTEM OF CREDITS FOR CONTINUING MEDICAL EDUCATION IN ROMANIA

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One of the fundamental roles of College of Doctors in Romania is to "act in order to develop the medical profession and its prestige in the social life" and its declared aim for accomplishing this role is harmonizing and implementation of quality in med-

ical practice. In all the developed countries it is unanimous accepted today, that the key element of this step is the education. Modern evolution of the educational concept is incidental to the personalized continuity of the process, having as result the modeling of knowledge, aptitudes and attitudes appropriation, in order to optimize the applied performance, keeping accounts, on one side of the personality profile and the capacity of every human, and, on the other side, of the requests of quality of the services and of the socio-professional needs.
For that, the general tendency is to enlarge the concept of continuing professional education, by amplify the use of feed-back obtained from the professional practice based on the criteria and standards of quality, the new established concept being that of continuing professional develop.
CMR considers a matter of actuality develop of its own program of CME, methodologically detailed in Decision no.67/2005, by monitoring its accommodation to the European and international standards, the recognizing and the integration of it in the similar programs of European Community.
The CME concept "is at the same time a necessity and an obligation of the medical profession, as well as in any other profession. The professional develop is permanent along the entire career of the specialist: begins with the basis, it continues with the specialization and it extends along the entire professional life through continuing medical education. Being an ethic and moral obligation, CME must be conduced and controlled with all the independence by the profession. In a fundamental way, it must be a personal and responsible decision of doctor. The representative national professional organization is free to decide in a democratic manner, that the respecting of CME criteria may constitute a formal obligation. In the same time, the specialist doctor who does not satisfy these criteria can't lose his quality of doctor or specialist, but he must understand the fact that he can be disadvantaged in another manner.
The content of CME must keep accounts by the specific situation of the doctor and it has, in consequence, an individual character. The quantification systems by units, hours or credits, CME hours are preferred to all evaluation and recertification of knowledge of the specialist doctor forms. The control of such systems must be by the hands of the representative organizations for the medical staff. These systems could include ways of self-control too." (quotation from "Proposals of classification and duration of the forming of specialists figuring in the directives of doctors" – UEMS, 1996).
A pertinent evaluation of CME can't be done only by collecting relevant information for the organizing and course of professional perfecting activities, which can be done through a permanent monitoring process of these activities of formal or informal education. Most of the time the two processes are approached together, the evaluation being in fact the aim of monitoring. At the level of the scientific professional department of CMR, CME is monitored since 1999. In the base of dates are introduced both formal educational activities (the post graduated courses organized by the medical universities) and informal (congresses, conferences, symposiums, round tables, etc. organized in principal by the medical professional societies of specialty) for which the providers of CME authorized by CMR, booked credits. For each action, the credits are given after the methodology reminded before and after it ends are made a list of the participants to the action and the model of the issued certificate. This way it had been realized: an evidence of the principal providers of CME, their accreditation by CMR, an evidence of the majority of actions organized by them and of the concrete plans of the actions, as well as the list of participants.
What is next to be realized, in the future steps, is: the identification of all CME providers and their accreditation, the obtaining, by a closer collaboration, of an increase of the quality of educational plans and programs offered by them, the orientation of the educational objectives of the actions towards the educational needs, and, not in the last place, and the most difficult to realize, the pass to an individual monitoring of CME, which is possible to be finalized until 2009 by computerizing the system. The landing of many different types of monitoring, in the process of evaluation, or the gradual combinations of different styles, it is possible along the changing process that we are living now and we are convinced that in time we will assist to the qualitative salt that we are expecting.

5. HEALTH SYSTEM FUNDING REFORMS AT A EUROPEAN LEVEL

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The need for improvement of funding mechanisms within the health sector is continuously increasing,

based on the high pressure for new technologies and treatments, the proven results of health services and the scarcity of resources.
Most of the European health care systems are facing the same common problems in delivering health care services: the poor definition of effective results, provision of inappropriate care, unclear definition of health benefits, great variations in clinical practice, lack of patient safety etc.
Reforming health system reimbursement involves in many countries an emphasis for payment accordingly with the results of provided health care services. In order to apply such an approach there are some prerequisites: understanding the importance of the health care results measurement, development of tools and indicators in order to measure these results, understanding the role of financing incentives for better results, development of instruments to pay for performance etc.
In the design and implementation of new payment reforms, there is a moving from a structure (inputs) and process approach to a results (outcome) one. The incentives used in introducing new payment mechanisms are targeting not only the provider of care (ambulatory providers, hospitals etc.), but also the clinical specialists who are effectively providing the clinical care. The payment agencies are continuously under the pressure to act more actively as good purchaser of best care and to develop and use methods that rewards performance.
The reforms themselves on this area should be carefully evaluated in order to see their effectiveness. In order to explore new roads on this area, new projects and mechanisms should be piloted and this requests policy support and courage. But the cost of doing the same ineffective things is grater than trying new financing reforms.

6. TOBACCO CONTROL POLICIES IN ROMANIA

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Tobacco use is one of the major risk factors, being responsible from around 8,8% from the total number of deaths around the world (4.9 millions per year) and from 4.1% from DALYs (59.1 millions). The global number of deaths attributable to tobacco was over 1 million more in 2000 than in 1990, with a most marked increase in developing countries. This huge number of deaths will grow to 10 millions yearly in 2030, following the current trend in tobacco consume and 7 from 10 tobacco-attributable deaths will occur in developing countries. However it remains still difficult to control the tobacco consume, especially in the developing countries which are more vulnerable. Also the tobacco control policies are cross-sectoral and much coordination is necessary in order to achieve the reducing of tobacco consume. In Romania there are currently around 5 millions active smokers. According to the existing studies, the prevalence of smoking in males is closed to EU average, but in females Romania has the lowest smoking prevalence. Around 65% from the current smokers started to smoke before the age of 19. This percent is lower than in more EU developed countries, meaning that, for a further maintaining or decreasing, strong measures should be adopted in order to discourage the teenagers to start smoking. During the last years a lot of measures were adopted in order to discourage the smoking habit: increasing taxation, fight against smuggling, increasing awareness of the population, especially directed to young people, providing facilities for quit, decreasing passive exposure. Each of these interventions had strengths and limits and a critical analysis of their results is a key element for the success of their further implementation. In the mean time, the fast progress of tobacco products and marketing techniques of the tobacco companies require a careful monitoring and a strong intervention of the Government for the public health benefit. The great allz in this war is the civil society that should be encouraged to mobilize.

7. COMMUNICABLE DISEASES - PUBLIC HEALTH PRIORITY IN THE EUROPEAN UNION

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Even most of the burden of diseases in EU is due to non-communicable diseases, the infectious diseases still remain an important public health problem that concerns every member state, but also EU globally. In a globalised world, the consequences of communicable diseases can be very severe, rapid or can affect many countries. This is the reason for which communicable diseases are subject to an EU Directive even health is managed in EU members based on subsidiarity principle. In 2005, an EU agency was created with aim to strengthen

Europe's defences against infectious diseases. In 2007, the first report on the status of the communicable diseases in EU was published by ECDC. This report tries to identify the global situation in EU, but also the limits of the health systems and especially of the surveillance system in every country, together with the main measures that need to be developed in the future for a better control of CD.
The main conclusions of the report reveal that the overall incidence of communicable diseases (CD) under surveillance today is low in Europe and the EU citizens have a reasonable level of protection. However, a great heterogeneity can be noticed for the incidence levels for some diseases between EU countries or between socio-economics groups. Many differences exist in health services organization, especially in surveillance systems, requiring careful interpretation of the reported data. Targeted measures have to be taken in the future as follow:
- Strengthening the CD surveillance systems. A strong integrated surveillance system to cover all relevant diseases should be developed at EU level, taking into consideration also laboratory data;
- reviewing the present list of disease for EU-wide surveillance at regular intervals to determine whether all diseases still merit inclusion in the list or whether any other diseases should be added;
- Increasing EU's capacity to meet CD threats and enhancing the scientific basis for CD prevention and control;
- Building stronger human resource capacity for CD prevention and control;
- Providing better information on CD prevention and control to different target groups;
- Creating synergy in CD prevention and control through stronger partnerships in Europe.
These measures should help to improve the management of CD across the EU and to be prepared to answer to the shifts that will occur in the CD panorama in the future.

8. INTERSECTORIAL STRATEGIES ON THE PROMOTION OF A HEALTHY LIFESTYLE TO YOUNG PEOPLE

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Abstract:
Health is largely due to the socio-cultural, economic and environmental conditions we are living in. As a result of social factors and behaviours, lifestyle influences health state in a percentage of more than 40%. Adolescence (according to WHO – the age between 10-19 years old) requires special attention, as during this period of time many behaviours are built up, as well as many customs and attitudes that have a permanent impact on health, later as an adult. The involvement of a large number of sectors of activity, together with a health system which should develop more the promotion and control activities, represent essential conditions for the diseases that can be prevented to stop affecting more and more people. There are seven main risk factors identified by WHO, which are considered responsible for 60% of the total of illnesses. These risk factors are: hypertension, alcohol consumption, smoking, high level of cholesterol, reduced consumption of fruits and vegetables, lack of physical activity. The dramatic overweight is defined by WHO as a global outbreak with important consequences on public health. This is mainly due to the reduction of the physical activity and to the changes in food customs, as a result of environment changes. The strategies for preventing obesity have greater effects on children and young people due to many reasons: children, according to the height – weight potential have better changes to go back to a normal development of the body if their weight is under control; lifestyle-related behaviours are established in childhood and continue during youth; young people are more flexible in changing their lifestyles. The need for developing and implementing intervention strategies at national level was thus identified. The intersectorial strategies on promoting the customs of a healthy food and physical activity, as well as the lessons learnt in order to put into practice these policies are presented as case studies for Croatia, Denmark, France, Germany, Italy, Norway, Slovenia, Spain, Scotland and Wales.

9. PATIENT DATA UTILIZATION FOR THE MANAGEMENT OF HOSPITAL RISK IN ROMANIA

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The indicators for adverse events screening, developed by Wolff in Australia, use ready available data

in order to identify "red flag" cases that might need to be reviewed by clinicians in terms of medical documentation.
In this study the 8 indicators developed by Wolff were used in the process of screening the electronic patient records from the 41 district hospitals in Romania. Data used is the Romanian Minimum Basic Data Set for 2006 collected at the National School of Public Health and Health Services Management, the institution in charge with data collection and processing. From the 8 indicators selected by Wolff, only one could not be used due to lack of data in the Romanian Minimum Basic Data Set.
The distribution of these indicators on the 41 district hospitals shows wide differences among hospitals. This could represent an indication of higher clinical risk at some hospitals, but they can mean as well errors in the collection and management of data from the electronic patient records.
The study shows that the indicators can be used by hospitals for benchmarking clinical risk, although a better standardization and monitoring of data reporting is necessary in order to increase their validity. The Minimum Basic Data Set represents an accessible instrument for identification and measuring of clinical risk, but for purpose of utilization at national level we recommend at first the validation of data used to build the indicators, followed by the testing of the sensibility, specificity, and the positive and negative predictive values.
Limitations of the instrument can be surpassed if it can be integrated with other instruments of clinical risk, such as medical records audit, incident reporting etc.

10. DENTAL TREATMENT NEEDS IN 12 YEAR OLD SCHOOLCHILDREN IN CRAIOVA

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Aims: An epidemiological survey was carried out in september 2007 researching dental caries and treatment needs in a 12 years old schoolchildren population in Craiova, Romania.
Methods: The study included 103 children from 4 schools in Craiova. The descriptive epidemiological indexes of caries for the whole sample were: the mean value for the DMFT index, the mean value of SiC, preventive and restorative treatment needs, the proportion of children in no need of dental treatment, the children caries risk profile. The assessment of caries and treatment needs followed the international methodological standards prescribed by the World Health Organization (1997). **Results:** The DMFT index averaged 3.59 and the Sic index was 5.32. Only 4.85% of the 12-years-old children were clinically caries-free. High caries risk index was found for 48.54% of all children, while 46.6% of all children showed moderate caries risk index. Treatment needs reach a mean value of 3.21 teeth per person. Number of teeth with preventive treatment needs (PCA) was 0.62 and number of teeth with restorative treatment needs (PCA+OCA) was 0.25. Proportion of children with no need of treatment (NAC) was 4.85%. The first permanent molars constituted 95.15% of the total caries experience of the schoolchildren. Over 90% of the caries lesions were found in pits and fissures. Dental sealant and resin preventive restorations were the most indicated interventions for the sample children. The next most indicated dental treatment is filling of one surface. Apart from higher caries prevalence in permanent teeth in females, no significant sex differences were found. **Conclusions**: In Craiova, in the future, extended caries preventive programs are needed to be developed in schools and kindergartens with special emphasis on prevention in high risk caries group.

11. BEHAVIOURAL ASPECTS OF ORAL HYGIENE IN CARDIOVASCULAR PATIENTS

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Aim: The study had the objective to determine the level of knowledge and attitude towards oral hygiene in a group of patients with different cardiovascular illnesses.
Methods: A group of 150 patients aged 62.32 (10.41) with different cardiovascular diseases (hypertension, coronary heart disease, chronic cardiac insufficiency) was included in the study. They answered to a questionnaire about oral hygiene and its importance for general health.
Results: Once daily dental brushing is performed by 44% of patients, while 24% of them never brushed. Only 24% patients from the group report-

ed professional education about dental brushing. Regarding last dental visit, 28% patients presented to the dentist five years ago, 24% patients were to the dentist 10 years ago and 16% patients have never done dental check-ups. Only 24% patients from the group presented to the dentist in the last year, but for emergency dental care and also only 8% patients have done preventive dental visits. Although 96% patients from the group have never been scaled, only 60% from them have complained about gingival bleeding. From these, 40% have made some correlation between inaccurate dental brushing and gingival bleeding. Only 40% patients from the group considered that oral hygiene and cardiovascular illness could have been related, and 28% patients could not have made a connection between the general health status and oral hygiene.
Conclusions: There is an important need for a better collaboration between the cardiologist, the family doctor and the dentist in order to make the patients fully aware of the impact of oral health on general health status, underlining preventive dental control importance in oral and general health.

12. STUDY OF IMMUNOLOGICAL MARKERS IN PAROTID TUMOURS

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Introduction: Parotid gland is a very important lymphatic organ which, through its secretory activity, exhibits a key role in oral cavity defense. It is already known that parotid gland secretes the highest quantity of IgA (s IgA) but also IgG, IgM which have an important role in oral cavity defense process against local pathological agents.
Aim of the study was to determine the presence and quantifying some of the important immunoglobulines and alfa 1 anti-trypsin immunological factor as well in parotid tumors.
Methods: Blood samples were harvested from 88 patients with parotid tumors and from 20 healthy donors who constitute the control lot. The samples were performed using Mancini technique (radial simple immunodifusion). Final data were statistically analyzed by performing student t-test.
Results: All tested immunoglobulines (IgA, Ig G and Ig M) show high values in most of the investigated tumors. The exceptions were IgA showing up a lower value in spinocellular carcinoma as compared with the controls as well IgG in undifferentiated carcinoma. There were detected increased serological values of alfa 1 anti-trypsinin in the following tumor types: pleomorph adenoma, Wathin tumor, adenocarcinoma, undifferentiated carcimoma and ductal carcinoma.
Conclusion : In parotidian deseases the investigated immunoglobulins and alfa 2 antitripsin, seems to have a clinical importance, their of neoplasma farther investigation are needed to see the value of this immunoglobulin in clinical prediction also their relevance the diagnosis of other parotidian neoplasma.

13. THE OSTEOGENIC POTENTIAL OF EMBRYONIC STEM CELLS

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Introduction: The seeding of embryonic mice stem cells on a scaffold obtained from red deer decidous horn, could form an osteogenetic complex, that could be used in grafting bone defects.
Aim: This aim of this study was to evaluate the osteogenetic potential of a tissue engineered bone using embryonic mice stem cells seeded on a scaffold obtained from the red deer decidous horn.
Methods:The embryonic mice stem cells where from R1/E/NA cell line provided by Dr. Elen Gocza, Godollo, Hungary. We started culturing the cells on scaffolds obtained from red deer decidous horn using passive seeding in flasks containing basal or complex osteogenic medium. Cell differentiation in vitro was assessed biochemically by alkaline phosphatase activity. The tissue engineered constructs were implanted in bone defects surgically induced in the left parietal bone of the mices and ectopically.Bone formation in vivo was quantified by histologic examination at 2 and 4 months after in vivo grafting.
Results: Culturing the cells in osteogenic medium on the scaffold, induced bone formation, showed by high alkaline phosphatase activity.
The tissue engineered constructs produced ectopic bone tissue at low frequency and amounts. The microscopic evaluation of the tissue, generated in the defect, demonstrated bone formation.
Conclusions: Our data indicates that embryonic mice stem cells can be cultured on red deer decidous horn, the engineered complex is osteogenic.

14. RELATIONSHIPS BETWEEN THE 12-YEAR-OLD CHILDREN`S ORAL HEALTH STATUS AND THEIR PARENTS' SOCIO ECONOMIC STATUS, ORAL HEALTH KNOWLEDGE AND ATTITUDES

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Oral health knowledge is considered to be an essential prerequisite for health-related attitudes.
Aim: the aim of this study was to evaluate the relationships between the 12 year-old children`s oral health status and their parents SES (socioeconomic status), oral health knowledge and attitudes.
Methods: the study was made on 259 representative randomly selected samples of 12 year-old children from Constanta District and their parents, in 2007. School authorities were responsible for obtaining the ethical approval. The children`s oral health status was evaluated using the W.H.O. criteria for diagnosis and registration of the DMFT, DHC-IOTN and CPI indices. A questionnaire was distributed to the children`s parents, in order to obtain information on their SES, oral health knowledge and attitudes concerning the children`s oral health behavior. All the knowledge answers (31) were summarized by giving equal weight (1) for each of the correct answers. Statistical analyses were done using SPSS 12 (ANOVA for testing the between groups variation; descriptive statistics for analysis of SES, clinical indices and proportion of the answers; Pearson coefficient for measuring the association between two variables).
Results: The response rate was 90.34% (n=234). The mean DMFT was 3.15 (±3.06), without significant differences between boys and girls (p=0.075). The DHC-IOTN grades were: 59.4% (n=139) - no need/slight need, 32.5% (n=76) - borderline need and 8.1% (n=19) - great need for orthodontic treatment; the gender distribution of DHC grades of IOTN was not significant (p=0.273). The CPI scores were 0 for 81.6% (n=191) subjects and 1 for 18.4% (n=43) subjects, with bigger values for girls than boys (p=0.048). The mean parents oral health knowledge was 16.28±5.48 (52.52% from the total correct answers). The SES had a middle mean value. The parents oral health knowledge was associated with all three SES variables: mothers (p=0.037) and fathers education level (p=0.003), family income (p=0.002) and also with DMFT Index (p=0.049), but not with DHC-IOTN (p=0.836) and CPI (p=0.948) indices. A significant higher parents oral health knowledge was associated with children`s daily toothbrushing (p=0.002), the use of a fluoride toothpaste (p=0.004) and the personal check-up of their children`s teeth (p=0.014). There was a negative association between the parents oral health knowledge and the frequency of eating sweet meals (p=0.032).
Conclusions: The study results showed a low level of parents oral health knowledge, reflected in a limited involvement in their children`s oral health behavior and associated with a relatively high level of dental caries of their children. Increasing the parents oral health knowledge should be the first step for improving the children's oral health behavior and status.

15. IMPROVING MASTICATORY FUNCTION, AESTHETICS AND PATIENT SATISFACTION WITH IMPLANT-SUPPORTED MANDIBULAR OVERDENTURE

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The **aim** of the investigation is to compare in a prospective study the esthetic apparence, satisfaction level and masticatory capacity of mandibular edentulous individuals, applying questionnaires adapted from the indexes oral health-related quality of life (OHIP) and its short form OHIP-EDENT during the phases of rehabilitation treatment with a two-implants supported overdenture and the use of Straumann Implant System for elderly patients.
Methods: 69 patients (age 42-84) fully mandibular edentulous with severe alveolar ridge atrophy and instability of the existing lower denture were enrolled in the study.Each patient received two screw-type implants in the interforaminal region of the mandible. After 6 weeks healing period a new denture was made and the patients randomly assigned to one of the following equal groups: retentive anchors(B), magnets(M) and locator system (L).All patients rated with the aid of questionnaires their general satisfaction as well as other features of their dentures (esthetic, comfort, stability, ability of chewing, speech and cleaning ability) prior to the treatment and at 6 and

12months. **Results:** All the groups had less oral health related quality of life problems than before treatment. **Conclusions:** Rehabilitation with implants produces a significant improvement in the esthetic apparence, satisfaction level and the masticatory capacity for elderly patients, despite the fact that the retention force of the magnet attachment is smaller.**Acknowledgments**: Supported by ITI Foundation for the Promotion of Oral Implantology, Switzerland, Grant no.316/2003 and no.507/207.

16. POSSIBLE NEW STANDARD PARAMETERS FOR PERIODONTAL DISEASE MANAGEMENT - INTERCELLULAR ADHESION MOLECULE 1 (ICAM-1) LEVELS IN GINGIVAL CREVICULAR FLUID AND DIRECT MICROSCOPY

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Introduction The intercellular adhesion molecule-1 (ICAM-1) is a membrane-bound molecule involved in cell-cell adhesive interactions which is upregulated on epithelial cells in inflammation and could be important for migration and retention of inflammatory cells in the damaged tissue. The ICAM-1, also exist in a soluble form (sICAM-1). **Aims:** The aim of this study was to investigate the presence and the relation between the concentration of sICAM-1 in the gingival crevicular fluid and the levels of periodontopathic bacteria in periodontal pocket from patients with adult periodontitis. **Methods** 5 healthy subjects and 14 patients with clinical diagnosis of adult periodontitis were included in this study. Sampling was performed using steril paper points. The levels of sICAM-1 were studied using an ELISA technique (Parameter, R&D systems, USA) and the number and composition of the bacterial flora were observed using direct microscopy technique, with respect to oral spirochetes associated with adult periodontitis. The levels of bacterial flora in the sample were labeled from 1 to 4 according to the number of spirochetes (rare, low, medium, high).**Results** Our method detected sICAM-1 values only in 1 from 5 healthy subjects and 6 from 14 patients diagnosticated with adult periodontitis. From 7 samples with high levels of sICAM, 6 were associated with an increased number of bacteria. sICAM values were correlated with different stages of plaque accumulation, the higher concentration the greater number of bacteria present in the sample we found. All healthy subjects revealed rare number of spirochetes at direct microscopy.
Conclusion These results suggest that elevated GCF sICAM-1 levels may represent increased shedding of this molecule in the interstitial fluid as a result of membrane-bound ICAM-1 up-regulation on ICAM-1 gingival-bearing cells in relation with plaque accumulation and inflammation, both parameter being reflected in the bad clinical status. Undetectable sICAM is associated with decreased subgingival plaque.
The sICAM-1 values could be use for diagnosis and therapy evaluation in periodontal disease.

17. DIAGNOSTIC METHODS FOR IDENTIFICATION OF AEROBIC AND ANAEROBIC FLORA IN PERIODONTAL DISEASE

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Aim: Microbiological examination of aerobic and anaerobic microbial flora of adult patients with periodontal disease.
Method: We studied 12 subjects(6 female and 6 male)within 35-55 years;periodontal status was assessed by determination of the probing packet depth(CPI) and clinical attachement loss(CAL).
Microbiological samples was collected from the supra gingival and sub gingival plaque of each patient using sterile paper point which was inserted supra gingival and sub gingival in the depth of each periodontal pocket. The samples were transported in transport medium to the Department of Microbiology and were cultured aerobically and anaerobically on selective agar for a various group of bacterial and fungal groups(respecting NCCLS norms). Bacterial identification was made using API-system bio-Merioux.
Results: Anaerobic species isolate from sub gingival plaque were: Propionibacterium (2 strains); Bifidobacterium spp (1 strain); Prevotella oralis (3 strains); Bacteroides ovatus (4 strains); Veillonella parvula (8 strains).
Aerobic species isolated from supra gingival plaque were: Streptococcus spp (4 strains); Staphylococus coagulase-negative (8 strains); Neisseria spp (3 strains); S. aureus (1 strain). We found only one strain of Candida in supra and sub

gingival plaques at the same patient. In gingival abscess we founded only anaerobic species.
Conclusions: In supra gingival plaque the most frequently species identified were: Staphylococus coagulase-negative and Neisseria spp.
In sub gingival plaque the most frequently species identified were: Veillonella parvula followed by Bacteroides ovatus and Prevotella oralis.
The anaerobic strains (18) isolated in this study were found in a higher incidence than aerobic strains (16).

18. ROOT CANAL MORPHOLOGY OF MAXILLARY FIRST MOLARS

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Aim: To investigate the root canal morphology of maxillary first molar for 33 teeth using a canal staining and tooth-clearing technique. **Methods:** Thirty-three extracted maxillary first molars were collected from several dental clinics of Constanta city. Following pulp tissue removal and staining of the canal systems, the teeth were decalcified with hydrochloric acid, dehydrated with ascending concentrations of alcohol and rendered clear by immersion in methyl salicylate. Cleared teeth were examined by eye and the following features were evaluated: number and type of root canals, presence and location of lateral canals and intercanal communications, location of apical foramina, and frequency of apical deltas. **Results:** The majority of the palatal roots had a single canal type 1 (87.77 %) and only 12.12% had 2 canals type 4; the distobuccal root had one canal type 1 in 96.96% of cases and two canals type 4 in only 3.03% of cases; the mesiobuccal root is the most complex of them, it had all types of canals: 3.22% of canals were type 1, 12.90 % type 2, 6.45% type 3, 64.51% type 4, 12.90% type 5.**Conclusions:** The prevalence of two canals in this group of maxillary first molar was 77% for the mesiobuccal root, followed by the palatal root, with 12.12% and the distobuccal root with only 3.03%.