the components present in a natural integral tooth, which necessarily requires conservation of the components of enamel margin-type in the vicinity of the lesion because, even at minimum sizes, the margin of the obturation should become invisible.

The indications for a direct therapeutical selection should always consider the individual decision of the patient, his medical, cosmetic and economic requirements and expectations.

Keywords: rehabilitation of the aesthetic function, layered obturation, silicone key.

OBTAINING AN EFFECT OF THE "TOOTH NATURALLY" BY LAYERING METHODS FOR AESTHETIC RESTORATION

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Introduction: The increasing concern in personal look and image also increased the demand for aesthetic and even cosmetic restorative treatments, calling for the application of some new, complex methods capable of meeting such requirements.

Objectives of the study: The study evaluated the distribution, on sexes, of the patients who required aesthetic restorative treatments.

Materials and method: The investigations were performed on a number of 37 de patients, interested in having an improved physiognomy of the frontal area through physiognomic obturations.

In the present study, the restorations made use of traditional techniques, involving no color and translucence control, as well as of modern layering methods for aesthetic restoration. In the group under investigation, the importance of the aesthetic requirements was established versus the sex of the patient, and the extent of application of the complex aesthetic restoration methods, out of the total number of treatments with physiognomic materials. Finally, the extent of patients' satisfaction for the result obtained was also determined.

Results: It is evident that women (representing 76% of the whole number of patients under study) are more concerned of the aesthetic quality of the obturations. Only 43% of all patients preferred complex obturation methods, even if they were told that higher aesthetic standards may be thus attained, their explanation being the prolonged duration of the treatment and also the higher costs involved. 71% of the patients under investigation considered that - aesthetically - the restoring treatment was highly satisfactory.

Conclusions: the aesthetic quality represents an essential condition for the success of the restoring treatment of the frontal group, the modern multilayered techniques with composite resins representing an optimum option in such cases.

Keywords: composite resins, aesthetic restorations.

STEM CELLS IN DENTAL CARE

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Introduction: Tooth loss compromises human oral health. Although several prosthetic methods, such as artificial denture and dental implants, are clinical therapies to tooth loss problems, they are thought to have safety and usage time issues. Probably, development of stem cell research will, over time, transform dental practice in a magnitude for greater than did dental implants. Recently, tooth tissue engineering has attracted more and more attention. Stem cell based tissue engineering is thought to be a promising way to replace the missing tooth. This review outlines the recent progress in mesenchymal stem cell research and use in tooth regeneration, oral and craniofacial applications.

Methods: The study was effectuated on 25 extracted pigs teeth aged between 2-3 months. The cells were obtained from dental pulp fermentation in 0,25% dispase I for 10 min at 37 ^{0}C. The cells were cultivated in 24 well in triplicate, in DMEM, 10% FBS, 5%CO2, 96% humidity, 37^{0}C.

Results: The cells were cultivated in 0,5x10^6 per well, in 24 well culture dish during five days. At the end of this period cells were colored by Romanovski and counted under the light microscope. The number of the cells after seven days cultivation were: 4,5 millions in one ml. of suspension.

Conclusions: Despite the rapid findings and wealth of data provided by *in vitro* and *in vivo* approaches in the field of dental regeneration, further research studies are required before pulp regeneration and even tooth restoration can be applied in dentistry. However, all data also confirm a realistic feasibility of dental tissue repair in the near future. It is obvious that our knowledge in dental tissue engineering expands rapidly. Stem cells from a tiny amount of tissue, such as the dental pulp, can be multiplied or expanded potentially to sufficient numbers for healing large, clinically relevant defects. Stem cells can differentiate into multiple cell lineages, thus providing the possibility that a common (stem) cell source can heal many tissues in the same patient, as opposed to the principle of harvesting healthy tissue to heal like tissue in association with autologous tissue grafting. Referring to previous findings, future experiments should be focused on the design of a highly sophisticated biological based scaffold system, which would greatly improve tooth viability and health maintenance in dentistry.

Keywords stem cell, tooth engineering, dental pulp stem cell.

DENTAL DISPENSARY IN UKRAINE: STATE, QUESTIONS AND PROSPECTS

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According to WHO data Dental disease is the most common and cover over 90% of the population of Ukraine. In recent years, this index tends to a constant increase. This leads to growth of somatic diseases, early loss of teeth, increasing the number of people who need dental prosthesis. Indicators of the intensity of cavities in both children and adult populations exceed European ones, reflecting the lack of treatment and preventive measures among the population.

Objectives: to identify the main reasons for the denial of dental care, optimize recommendations for attracting people to the dental clinical examination, treatment and prevention measures.

Methods: questioning, statistical and bibliographic methods.

Results: we conducted a survey among different population groups. Participated in this event 143 persons. The purpose of the research was to identify the main causes of failure of public dental care. The study found out: 39,2% (56 people) do not seek help from a dentist unless the cosmetic defect or pain is present, and consider themselves healthy; 11,9% (17 persons) do not visit dentist regularly because of the