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Movchan O.

**COMPARATIVE ANALYZE QUALITY AND QUALIMETRIC EVALUATION OF
ADHESIVES MATERIALS TO IMPROVE FOR THE FIXATION OF THE
REMOVABLE DENTURES**

**Kharkov National Medical University
Department of Orthopedic Dentistry**

The need for adult population of Ukraine in complete removable dentures is considerable and is 57.5 people (77.35 dentures) in 1000 examined. Complete absence teeth already registered in the age group 45-49 years, accounting for as a whole $6,3 \pm 0,67\%$ cases per 100 examined. Thus, the number of jaws with complete absence teeth and adverse anatomical-topographic conditions of prosthetic plate, reaches 87.1% of their total number (15.1% of the upper and 72.0% of the lower jaws). The total lack of teeth causes psychological, personality changes, violates social tolerance, changing nutrition. The concept of orthopedic treatment older people with removable constructions should be include different types of treatment, which have an individual approach. To date do not have perfect method of orthopedic treatment, which would give a guaranteed fixation of denture on Edentulous lower jaw, especially in cases of sudden atrophy or other of relief numerous changes of the oral mucosa. Using of adhesive means significantly increase the efficiency of fixation and stabilization of complete plastic dentures in adverse anatomical-topographic conditions of the masticatory apparatus. They increase the functional value not only manufactured again, but the old dentures also, reduce displacement of a denture on prosthetic plate, stopped excess of the food inside the dentures, it is causes, why complete removable dentures is comfortable. Currently, on the market for dental materials Ukraine of adhesive means for dentures a lot, but mostly they are imported and relatively expensive for the older people; adhesive means available in the form like a powders, creams, gels, materials artificial saliva and fixing strips. By research quality characteristics was developed and introduced into production in JSC "Stoma" new adhesive material "Stomafix" for fixation of removable dentures.

Purpose of research - advisability clinical application of adhesive materials and learning on the basis experimental justification of physical and mechanical properties according to the requirements ISO-10873: 2010 and qualimetric evaluation of the quality materials.

Materials and methods. Comparative analysis of the quality adhesive materials for improving fixation of removable dentures and chewing efficiency, and reducing the period of adaptation clinical exploitation included generalizing results for the laboratory study of the properties following materials: "Stomafix" JSC "Stoma" (Kharkov, Ukraine), «Corega» («Stafford Miller", Ireland), and «Lacalut» («Arkam GmbH", Germany), which provides ISO-10873: 2010: consistence, tensile strength, solubility, adhesion with plastic, metal adhesion, viscosity relative. For the listed parameters investigated qualimetric evaluation of samples adhesive materials to improve the quality of fixation of removable dentures.

Research results. By the indicator consistency, all materials meet the requirements of ISO-10873: 2010 and substantially ($p \leq 0,05$) do not differ among themselves. Thus, the investigated materials are characterized by a slight reserve compared to the indicative index. Tensile strength samples from adhesive materials exceeds the relevant indicative value of ISO-10873: 2010 to $(50 \div 60) \%$, except material «Lacalut», which as we know can reduce the quality of adhesion and influence the timing of its clinical use. Solubility adhesive materials characterized by the largest ($p \leq 0,001$) for material «Lacalut» - $(41,5 \pm 0,9) \text{ mm / h}$, while materials "Stomafix» - $(35,8 \pm 0,6) \text{ mm / h}$ and «Corega» - $(35,5 \pm 0,8) \text{ mm / h}$ in

this property do not exceed and indicative index, same time are significantly lower than for the material «Lacalut». By the indicator adhesion with plastic, the investigated materials by 40-45% higher than the indicative value of ISO-10873: 2010 that is able provide more base strength under dynamic loads. By the indicator adhesion to metal the investigated materials by 25-30% higher than the indicative value of ISO-10873: 2010 that increase the cohesion of metal base removable denture with mucosa. Viscosity relative at the time of application of the adhesive material varies within (62,0-68,3) s and is the lowest in the case of material «Lacalut» - $(62,0 \pm 0,6)$ s, and largest for the material «Corega» - $(68,3 \pm 0,2)$ s, $p \geq 0,05$.

Conclusion. Thus, based on the aforementioned comparative research adhesive materials for increasing the fixation of complete dentures can be concluded that according indicators ISO-10873: 2010, that is consistence, tensile strength, solubility, adhesion with plastic, metal adhesion, viscosity relative adhesive material "Stomafix" JSC "Stoma" (Kharkov, Ukraine) exceeds the indicative value of foreign analogues «Corega» («Staford Miller", Ireland) and «Lacalut» («Arkam GmbH", Germany), the expense of what there is increasing chewing pressure and reduce the period of adaptation of patients to of complete dentures. Research data allow to recommend "Stomafix" JSC "Stoma" (Kharkov, Ukraine) in clinical prosthodontics.

Vakula A., Kishkan A, Steblianko A.
CONDITION OF PERIODONTIUM TISSUES DEPENDING ON PREVENTIVE
ACTIVITIES

Kharkiv National Medical University
Department of Therapeutic Dentistry,
Kharkiv, Ukraine.

Supervisor - Rjabokon E.

Professional oral hygiene is one of the main stages in the periodontal disease treatment.

The aim of the study was to determine the status of periodontal tissues, depending on the different types of professional oral hygiene among patients with chronic generalized periodontitis of initial and first severity. We conducted a comprehensive survey among 28 patients aged 18-35 years with chronic generalized periodontitis of I severity without concomitant somatic pathology. Patients were divided into two groups. The first group included 13 persons, the second - 15 persons. All patients had poor oral hygiene (IG by Fedorov - Volodkina among patients of the first group was $2,6 \pm 0,35$ and $2,8 \pm 0,45$ among patients of the second group, the IG of Green Vermillion - $2,2 \pm 0,35$ among patients of the 1 group and $2,7 \pm 0,1$ among individuals of the second group). PI among patients of the 1 group was 2.36 ± 0.29 , in the second group- 2.45 ± 0.39 . PMA index of the 1 group was $48,20\% \pm 4,5\%$, the 2 groups - $42,40\% \pm 4,5\%$. The index of bleeding among patients of the 1 group was $2,45 \pm 0,30$ points, in the second group - $2,85 \pm 0,20$ points.

Patients of the first group had the removal of dental plaque (DP) manually, using a special hand curette, scalers, abrasive polishing paste "Detartrin» (Septodont) and polishing heads. Patients of the second group had the removal DP by ultrasonic scaler «Mectron» (Italy), air abrasion system Air-Flow (EMS) and teeth polishing.

One month later professional oral hygiene IG by Fedorov - Volodkina was $1,8 \pm 0,23$ among patients of the 1 group and $1,5 \pm 0,25$ among patients of the 2 group, the IG of Green Vermillion among patients of the 1 group- $1,7 \pm 0,1$ and the 2 group had $2,1 \pm 0,1$ points. PMA index among patients of the 1 group decreased and amounted to $17,04\% \pm 3,1\%$, and