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EVALUATION OF THE MASTICATORY PRESSURE VALUE IN HYBRID DENTURES OVER IMPLANTS IN MANDIBULA

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Abstract: In the clinical practice due to various factors we face with patients who have very few teeth left without prospective in the lower jaw. Due to reduced load capacity, they are loosening and soon are completely lost. Prosthodontics is a real magic that has great potential for a unique implant - prosthetic rehabilitation. The goal is to preserve the alveolar ridge and slow down its resorption. In the modern world trends, the conventional dentures are replaced by therapeutic methods and superstructures as modern prosthetic therapy for this problem. As an example of these restorations that are practically applied, we present multi unit system dentures with a single hybrid prosthesis. It is a conditionally mobile suprastructure fixed with screws on 4 implants. The combination of oral surgery with the placement of 4 implants and the hybrid prosthetic superstructure over them is known by a popular short name "all on four". There are many discussions and writings about this multidisciplinary concept in the professional world. Over the 4 implants, immediately is placed suprastructure with a maximum number of 12 teeth. The prosthetic construction circularly covers the entire toothless ridge. Bilaterally, the chewing center is mesialized in the area of the second premolar and first molar. The applied technique is a practical modern multi - combination for immediate rehabilitation and rapid restoration of the chewing function. The data obtained from the subjects with intact dentition indicate a difference in the development of the bite force in the chewing center. Significantly higher values were observed in subjects with a masseteric type of mastication with significant differences in the bite force in the molar region. Functional efficiency was significantly lower in subjects with total tooth loss with classic total dentures. This result is due to the gingival distribution of the load only to the masticatory gingiva and the alveolar ridge. The value of the bite strength in subjects with partial dentures with Kennedy I class of toothlessness according to the registration the performance in the chewing center is higher. There is a combination in the transmission of the pressure, some gingivally, some accept the remaining teeth. The functional efficiency is higher in hybrid denture subjects. The hybrid denture externally resembles a classical one, but unlike it, it is screwed in its base, fixed with nuts on the implants. It is retained exclusively on a minimum of 4 implants placed in the alveolar ridge, which later integrate with the bone during the chewing function. There is minimal mild tangential contact between it and the soft tissues of the alveolar ridge. It has the practical ability to be removed - unscrews for various needs such as perimplantitis treatment, additional plaque hygiene or any other adjustments and polishes. It is often used as immediate prosthetic therapy in patients who are in the transitional phase from partial - subtotal to total toothlessness. Namely, it is preventively applied to slow down the further atrophy of the supporting tissues and the resorption of the alveolar ridge.

Keywords: implant, denture, mastication, suprastructure.

ЕВАЛУАЦИЈА НА ВРЕДНОСТА НА ЦВАКОПРИТИСОКОТ КАЈ ХИБРИДНИ ПРОТЕЗИ НАД ИМПЛАНТИ ВО МАНДИБУЛА

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