



Periodontal Sensory Function Assessment in the Course of Prosthetic Treatment Phases

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SUMMARY. In the current study a sensory function of the periodontium of anterior teeth was examined during stages of prosthetic treatment with block and single prostheses for patients with a healthy periodontium through the method we developed (test for "food holding and splitting") and the "Periosensomer" device. We found out that during certain stages of prosthetic treatment in cases with anesthesia and fixation of temporary mouth guards connected into blocks, the sensory function of the periodontium is decreased up to 3-4. It can be either restored after fixation of permanent single prosthesis (e.g. veneers) and single crowns or remain reconstructed with fixation of permanent dental bridges and crowns based on implants. However, it should be noted that these sensory function is restored when the defect is replaced by dental crowns supported by implants, while maintaining the vitality of the lateral teeth in the area of the defect. Hence, as a result of the usage of block prostheses and due to a decrease of the sensory function of the periodontal leads to masticatory pressure increase and a functional overload of the teeth included in the block and their antagonists with all the ensuing complications. An assessment of the periodontal sensory function of the periodontal membrane receptors and the dynamics of sensory response can be used as a method of functional diagnostics in the clinic of dental implantation and aesthetic prosthetics.

RESUMEN. En el presente estudio se examinó una función sensorial del periodonto de los dientes anteriores durante las etapas del tratamiento protésico con bloque y prótesis unitarias para pacientes con un periodonto sano a través del método que desarrollamos (prueba de "retención y división de alimentos") y el dispositivo "periosensómero". Descubrimos que durante ciertas etapas del tratamiento protésico en casos con anestesia y fijación de protectores bucales temporales conectados en bloques, la función sensorial del periodonto se reduce hasta 3-4. Puede restaurarse después de la fijación de prótesis unitarias permanentes (por ejemplo, carillas) y coronas unitarias o permanecer reconstruido con la fijación de puentes dentales permanentes y coronas basadas en implantes. Sin embargo, cabe señalar que esta función de entrometido se restablece cuando el defecto es reemplazado por coronas dentales soportadas por implantes, mientras se mantiene la vitalidad de los dientes laterales en la zona del defecto. Por tanto, como consecuencia del uso de prótesis de bloque y debido a una disminución de la función sensorial del periodontal conduce a un aumento de la presión masticatoria y una sobrecarga funcional de los dientes incluidos en el bloque y sus antagonistas con todas las complicaciones consiguientes. Una evaluación de la función sensorial periodontal de los receptores de la membrana periodontal y la dinámica de la respuesta sensorial se puede utilizar como método de diagnóstico funcional en la clínica de implantación dental y prótesis estética.

KEY WORDS: periodontal ligament proprioceptors, sense of periodontium, sensor receptors of periodontal ligament, tactile sense of teeth.

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