

OPTIMISING THE SELECTIVE TOOTH GRINDING PROTOCOL FOR PATIENTS WITH GENERALISED PERIODONTITIS

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Goal. By optimising the selective tooth grinding procedure based on an objective examination of occlusal connections using the T-Scan digital occlusal analysis system, the goal is to increase the effectiveness of complete therapy for patients with generalised periodontitis.

Materials and Procedures. Twenty individuals with Stage I–II generalised periodontitis in the remission phase, ages 35–55, participated in the research. During the supportive treatment phase, all patients had their teeth selectively ground. The procedure for the examination comprised:

Clinical assessment of the state of periodontal tissue (PMA index, PI index, periodontal pocket depth).

Using the conventional approach (articulating paper, 40–100 μm), premature contacts and occlusal interferences are identified.

T-Scan Novus digital occlusal analysis.

The Jankelson technique was modified for occlusal correction, with an emphasis on normalising the masticatory load vector and removing traumatic occlusion.

outcomes. 100% of the individuals had noticeable hypercontacts, according to primary T-Scan analysis, with 35% of them being undetectable with conventional articulating paper. The centric connection was unstable, as shown by the mean occlusion duration of 1.8 ± 0.4 seconds prior to correction. Because of the computerised control and optimised selective grinding:

50% $\pm$ 3% of the weight was distributed equally between the left and right sides.

The occlusion period was lowered to less than 0.2 seconds, which is the physiological norm.

In 75% of the patients, pathological tooth mobility was reduced by 1-2 degrees on the Miller scale when the "lever effect" in the molar area was eliminated.

Based on radiographic data, the alveolar crest height stabilised at the 6-month follow-up, and there were no evidence of inflammation in the marginal periodontium. conclusions. The occlusal correction procedure may be objectified by using the T-Scan system in the selective tooth grinding protocol, which removes operator subjectivity. Optimising occlusal connections prolongs the time of remission in generalised periodontitis, normalises microcirculation in periodontal tissues, and helps alleviate symptoms of traumatic articulation. To attain functional equilibrium within the stomatognathic system, computerised monitoring must be added to traditional occlusal markers.

References

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