DIGITAL OCCLUSAL ANALYSIS IN NORMOOCCLUSION PATIENTS WITH T-SCAN III SYSTEM

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AIM

The objective of this study was to observe and characterize the occlusal balance of static and dynamic occlusal parameters in subjects with normoocclusion using the T-Scan III System as well as to determine the importance of T-Scan III System digital occlusal analysis in orthodontics.

Figure 1. T-Scan III hardware and software .

MATERIAL AND METHOD

In 10 patients with normoocclusion, Angle Class I, occlusal balance was quantitatively evaluated using the T-Scan III System, in position of maximum intercuspidation (MIP), protrusive and lateral excursion of the mandible. We analyzed the following parameters: occlusal contact distribution, bilaterally, determination of center of occlusal force (COF), occlusal time (OT), disclusion time and determination of functional type of occlusion.

Figure 2. Intraoral view of patient's normoocclusion .

RESULTS

Occlusal contact distribution in our patients was 48.7% on the left side and 51.3 % on the right side from the dental arch in MIP. Center of occlusal force (COF) was located anteroposteriorly in the region of the first permanent molar at 94% from our patients. 90% had occlusion time shorter or equal than 0.4sec and disclusion time shorter or equal than 0.5sec per excursion.

CONCLUSION

Normoocclusion patients are characterized by balanced occlusion. There is a correlation between occlusion and articulation. Ideal occlusion correlates with ideal articulation. T-Scan III System is a very important diagnostic tool for determination of correct occlusal pattern in orthodontics and provides us with high quality treatment results in every day clinical practice.
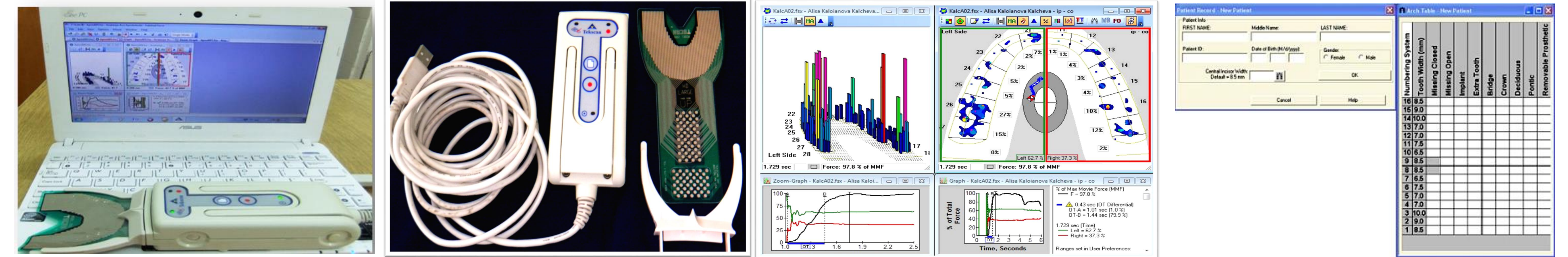
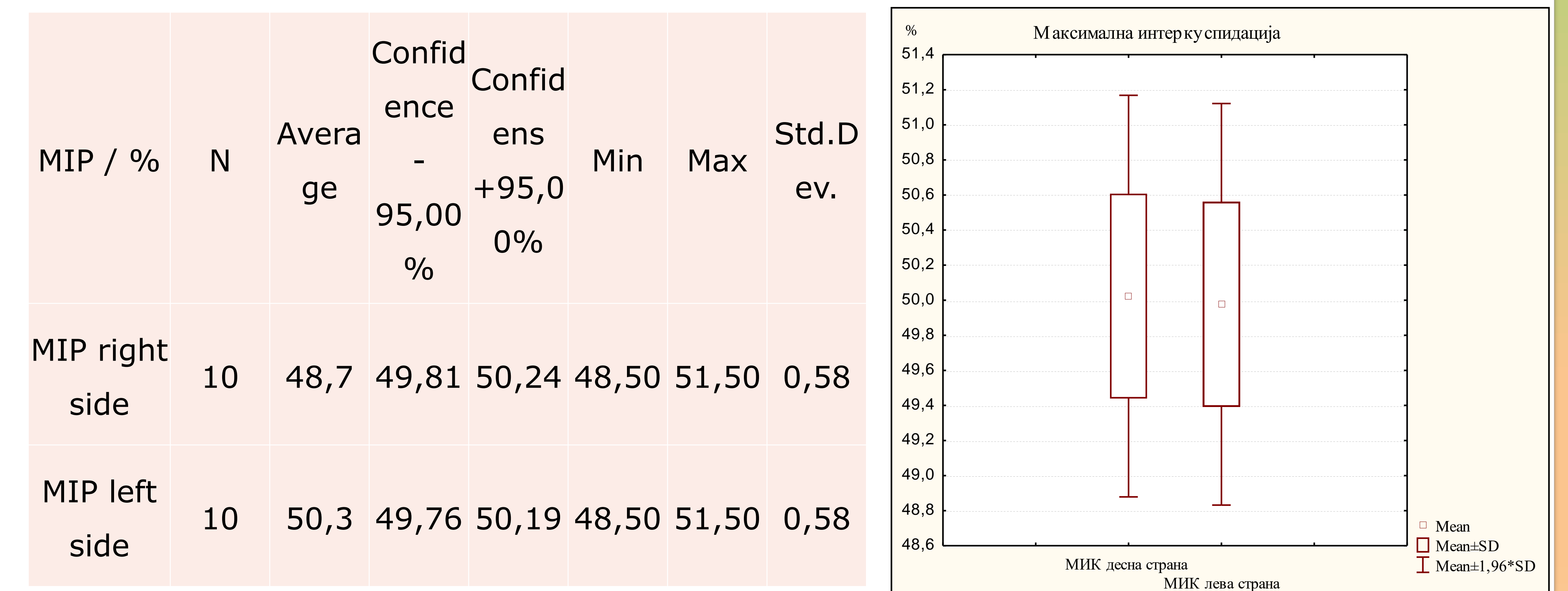| MIP / %	N	Average	Confidence -95,00%	Confidens +95,00%	Min	Max	Std.Dev.
MIP right side	10	48,7	49,81	50,24	48,50	51,50	0,58
MIP left side	10	50,3	49,76	50,19	48,50	51,50	0,58

Figure 3. Occlusal contact distribution in maximum intercuspidation.