CHARACTERIZATION OF OCCLUSAL STABILITY AS GOALS OF ORTHODONTIC TREATMENT

Tina Petrovic[1], Vesna Trpevska[2], Cena Dimova[3], Daniela Srbinoska[4], Natasha Stavreva[5]

[1]PDO Dr Blaga Petrovik, Skopje, Republic of North Macedonia
[2]PHO University Dental Clinical Center „St. Panteleimon", Department of Orthodontics, Skopje, Republic of North Macedonia, Faculty of Medical Sciences, Goce Delcev University, Stip, North Macedonia
[3]Faculty of Medical Sciences, Goce Delcev University, Stip, North Macedonia
[4]PHO University Dental Clinical Center „St. Panteleimon", Department of Orthodontics, Skopje, Republic of North Macedonia
[5]Ss. Cyril and Methodius University, Faculty of Dentistry, PHO University Dental Clinical Center „St. Panteleimon", Department of Prosthodontics, Skopje, Republic of North Macedonia

INTRODUCTION

Ideal positional relationships among the teeth within and between the arches, while condyles are positioned such that there is minimal strain on the muscles of mastication is the primary goal in every orthodontic treatment. Diagnosis of the occlusion based on static and dynamic parameters is important both in understanding symptoms and providing treatment plan and successful therapy.

Figure 1. Normoocclusion.

AIM

Evaluation of the occlusion details in subjects with normoocclusion as the orthodontic treatment goal with the T-Scan III system as a sophisticated tool for digital occlusal analysis in order to characterize their occlusal stability.

Figure 2. T-Scan III hardware .

MATERIAL AND METHOD

In all 30 subjects with normoocclusion we conducted occlusal analysis with T-Scan III system (Tekscan Inc., Boston, MA, USA) in position of maximum intercuspidation.

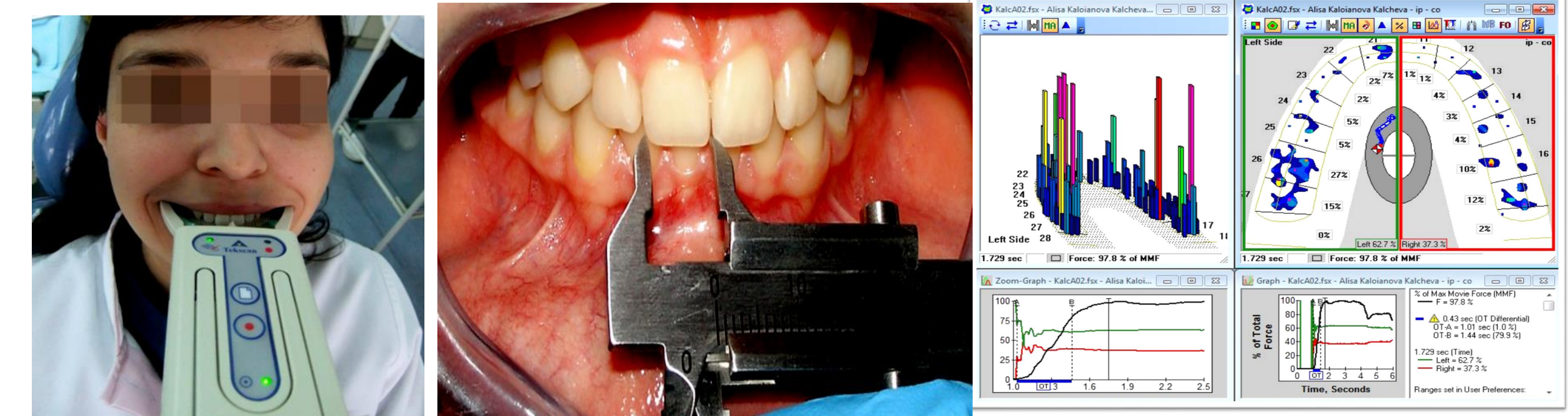*Figure 3. Intraoral view of patients normoocclusion .*

Figure 4. T-Scan III sensor and occlusogram.

RESULTS

The difference between the values for left side and right side in maximum intercuspidation for Z=0,57 and p>0,05(p=0,57) was not significant. Occlusion time was running in interval 0,29±0,12s, ±95,00%КИ:0,24-0,33, while the disclusion time was running in interval 0,21±0,10s, ±95,00%КИ:0,17-0,25.

CONCLUSION

The results showed that subjects with normoocclusion are charachterized with balanced occlusion and harmony in the masticatory system function. T-Scan digital analyses use in every day clinical practice is important in diagnose, treatment plan in all phases of orthodontic treatment.
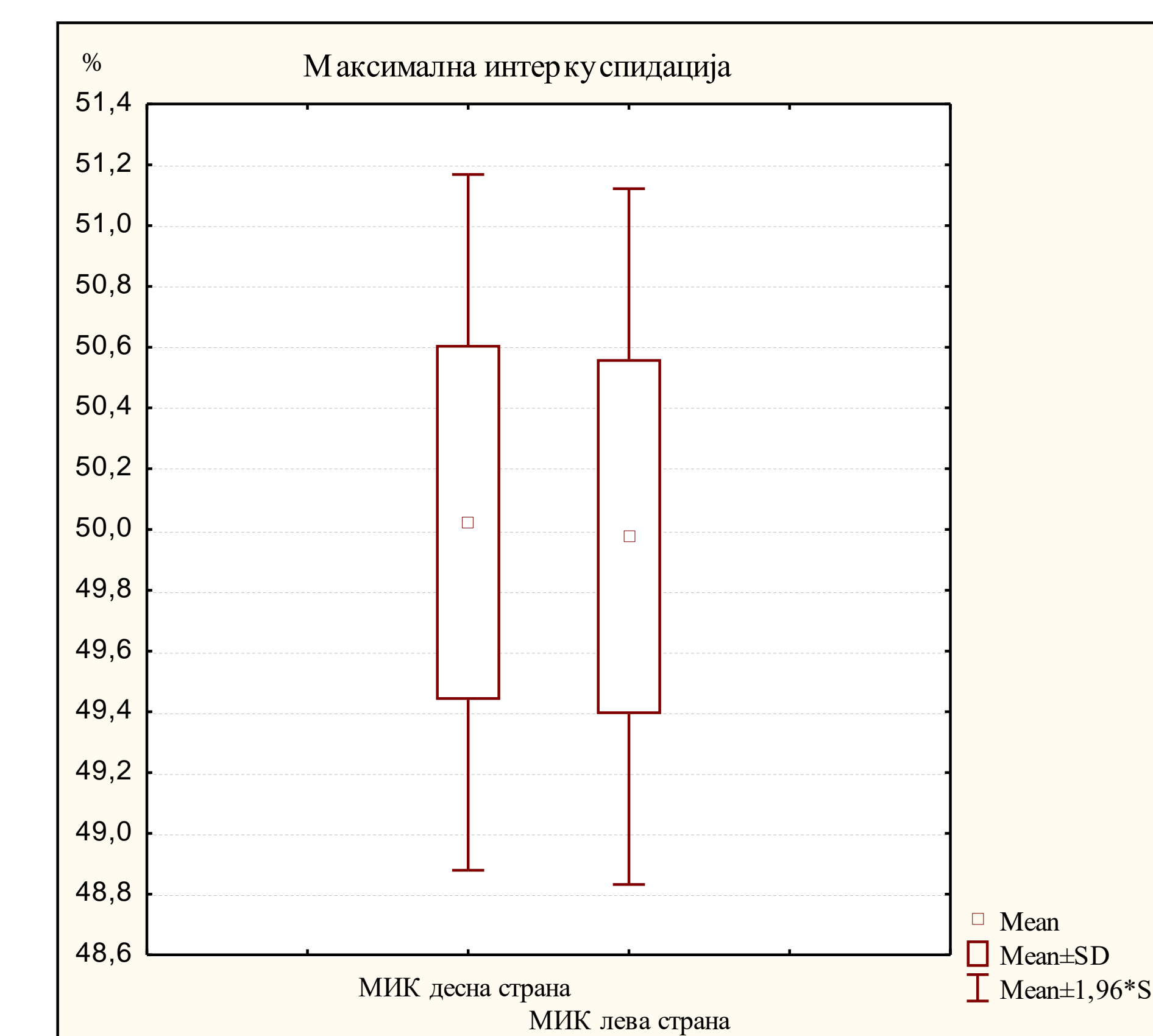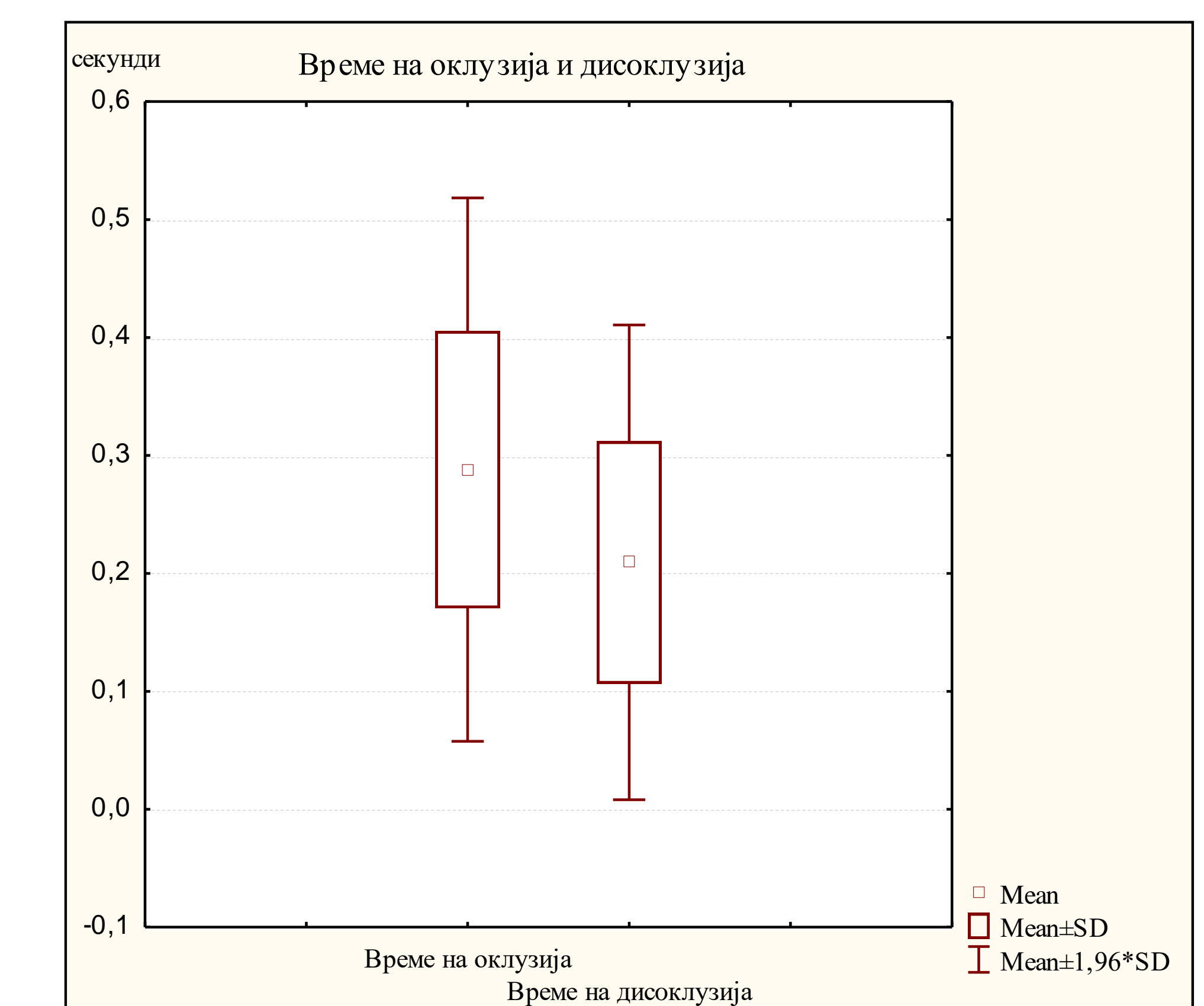
Figure 5. Results in maximum intercuspidation.

Figure 6. Results of occlusion and disclusion time.