

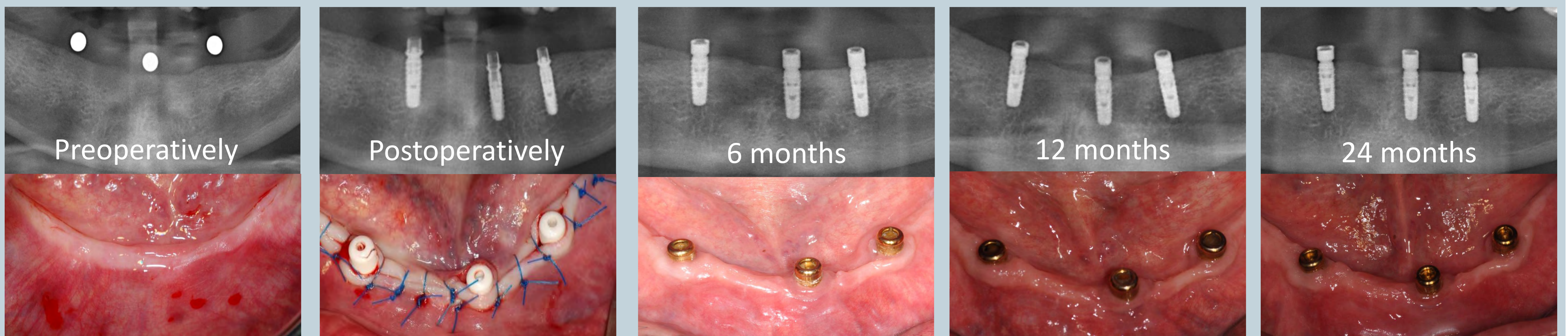
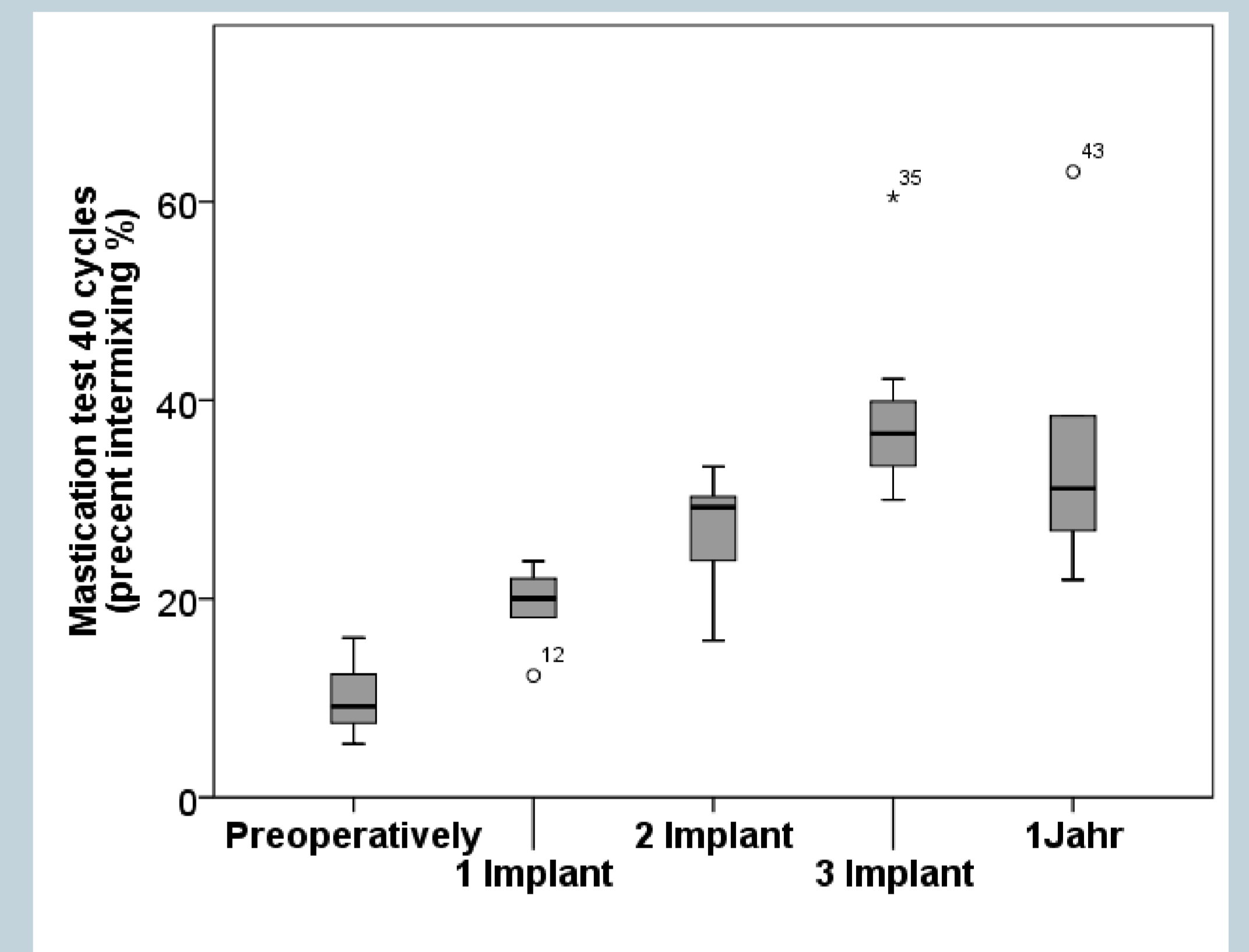
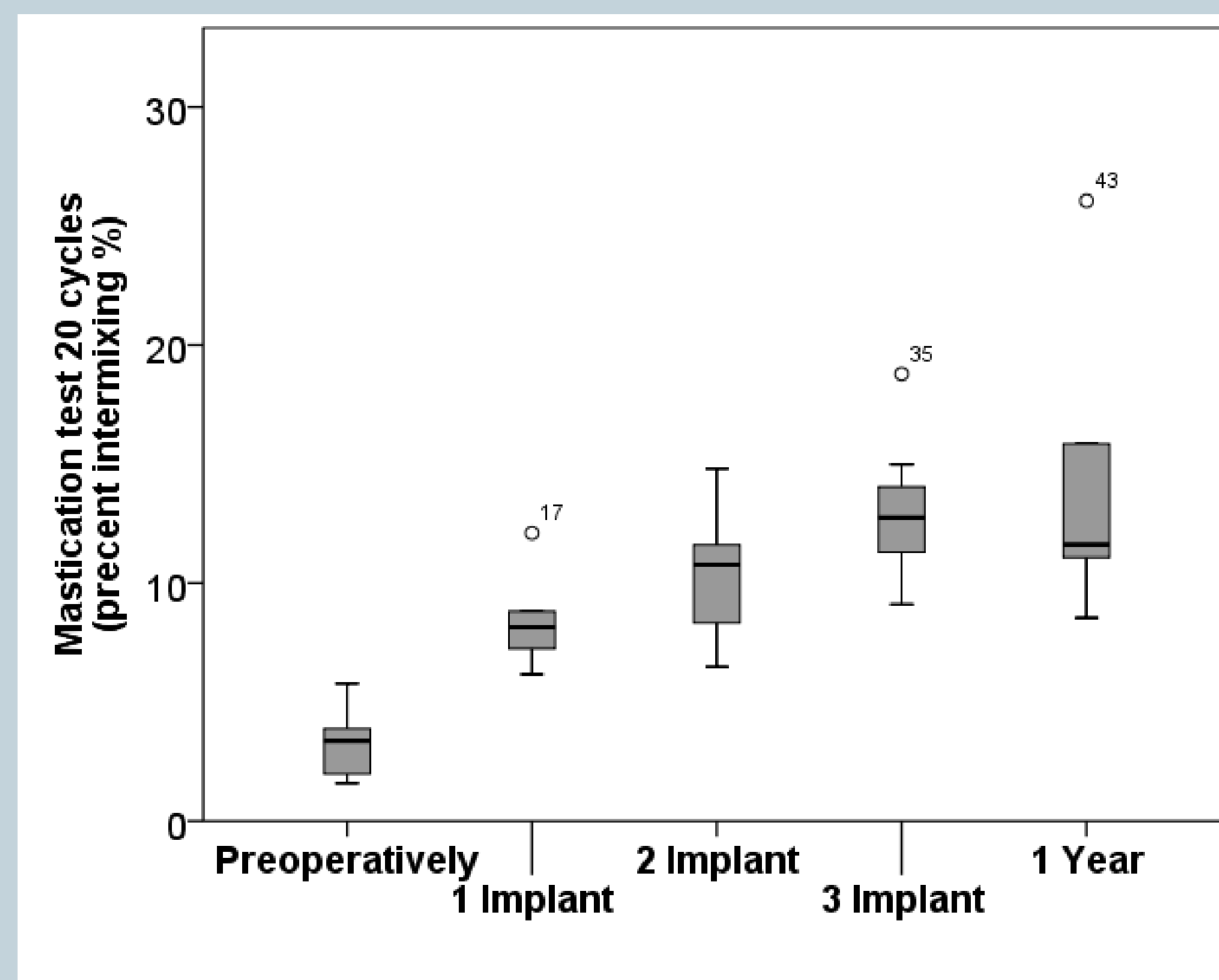
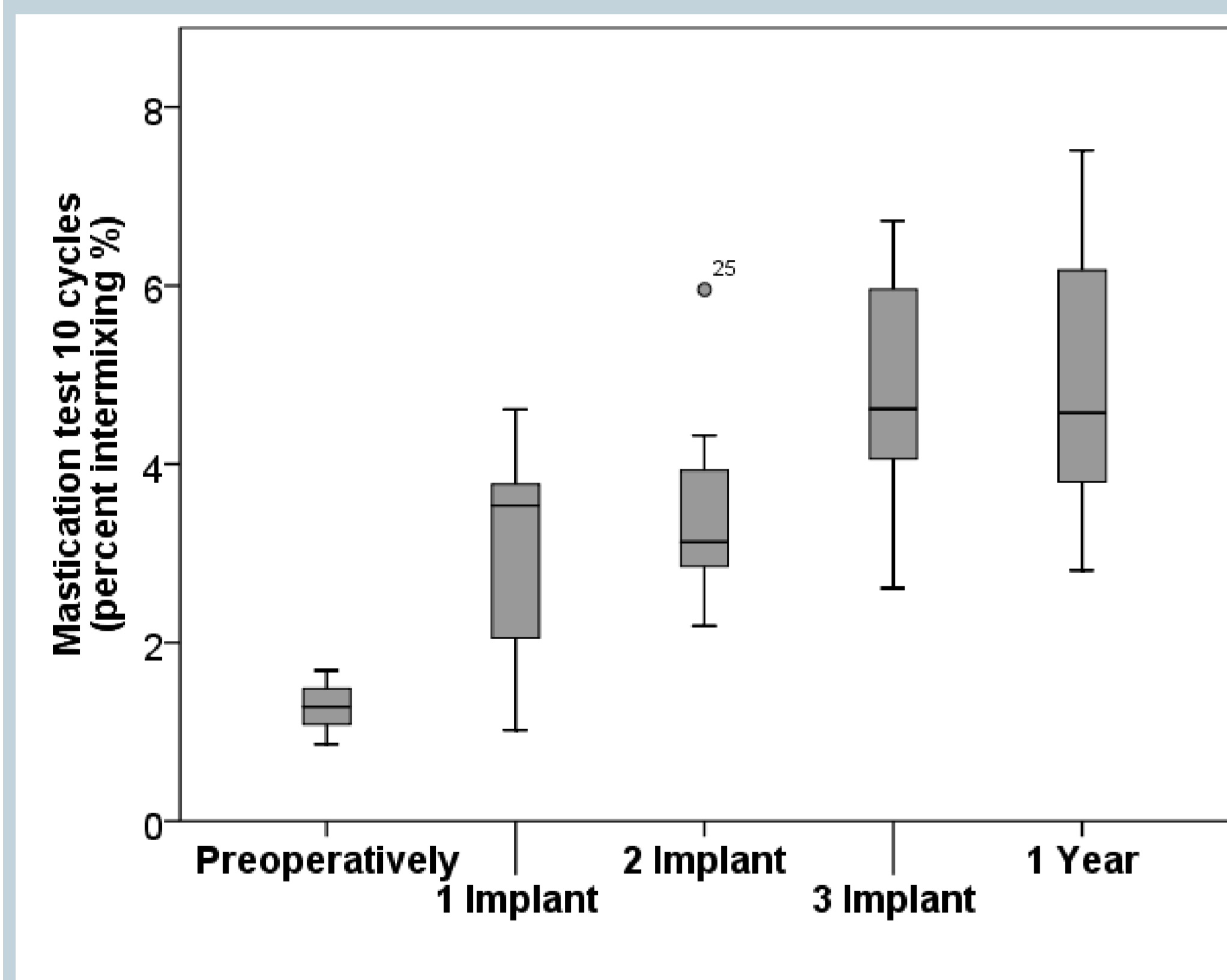
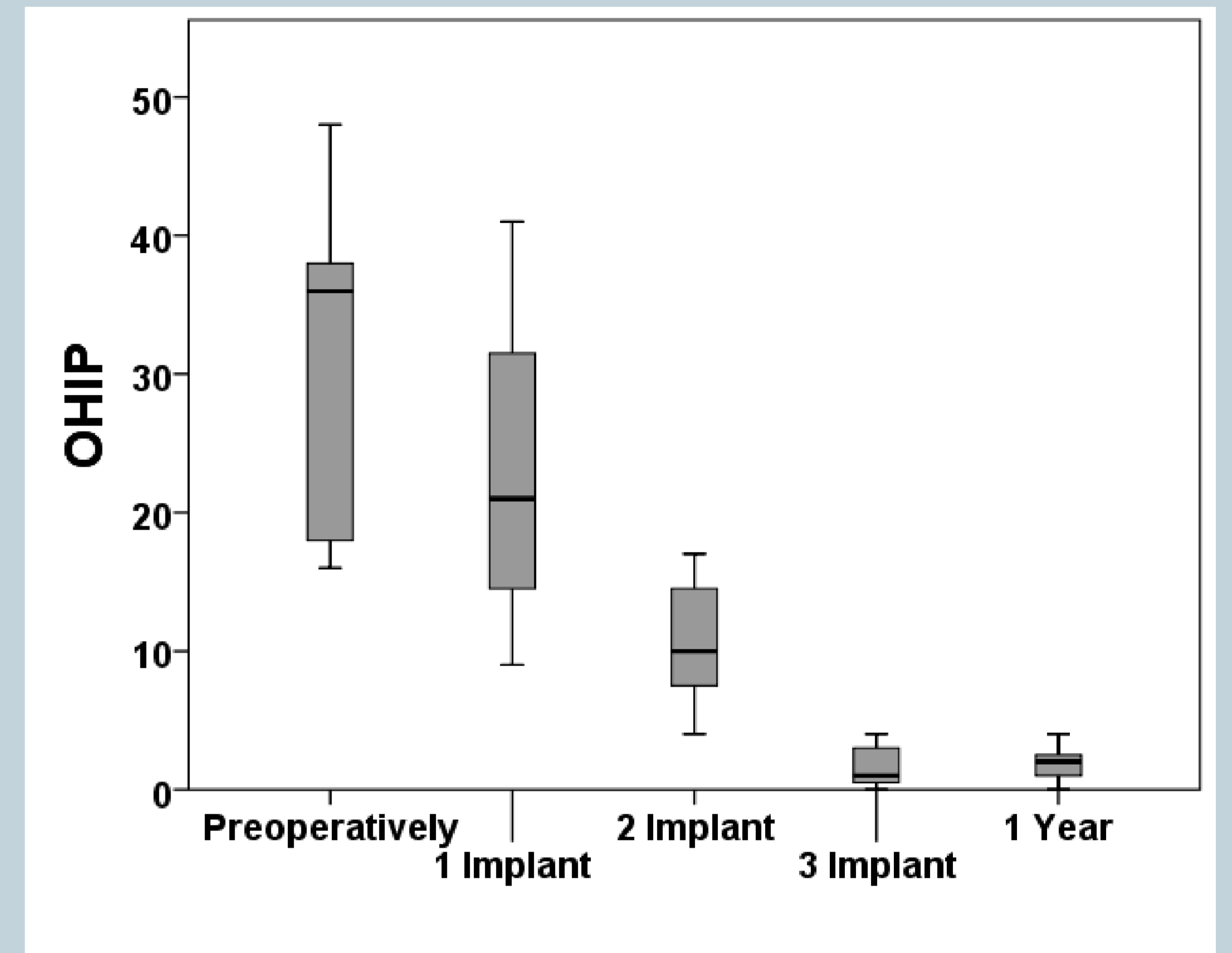
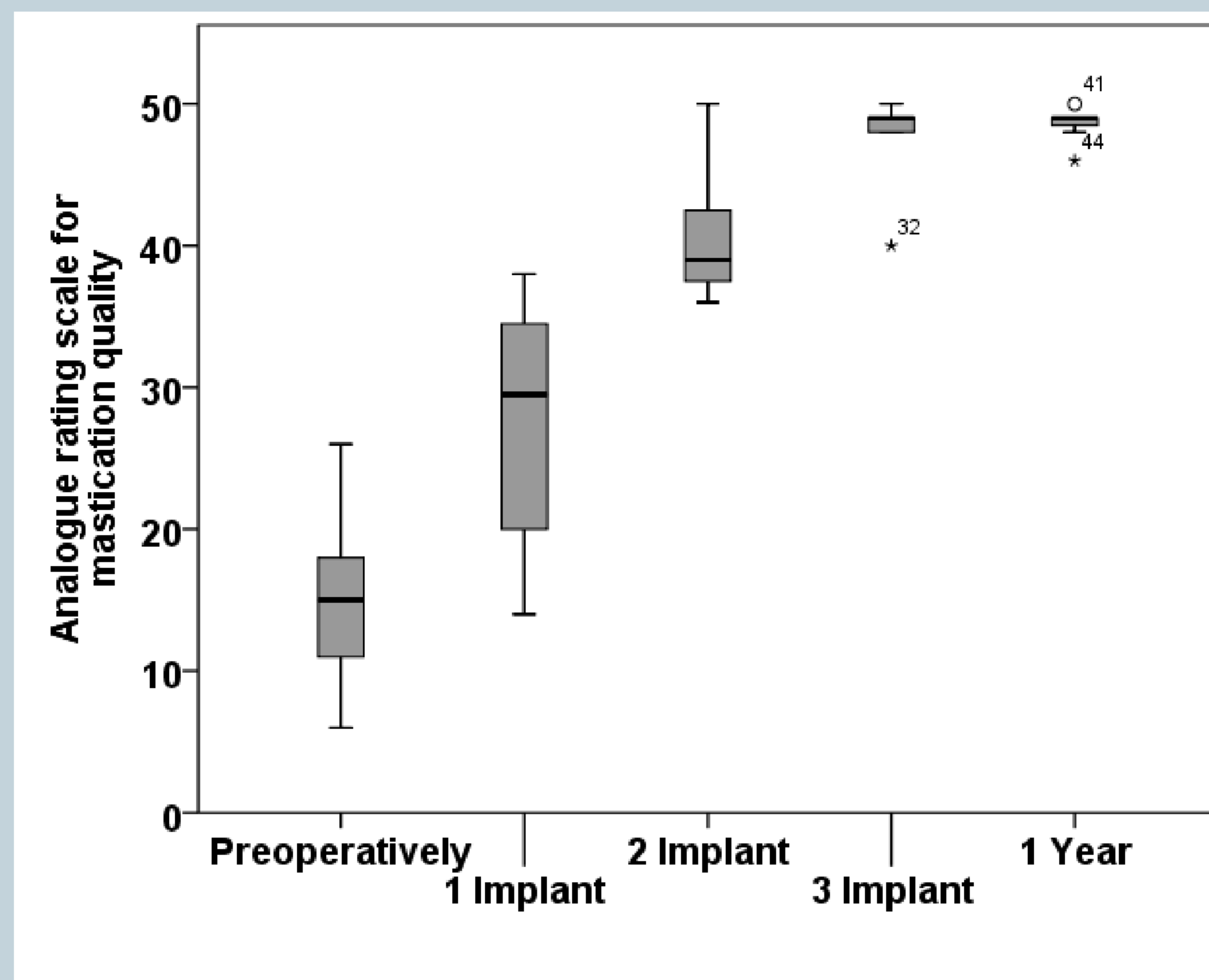
Mandibular overdentures retained by one, two or three implants: a prospective clinical trial

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Objective: The quality of life of edentulous patients had been improved since mandibular complete dentures can be retained by dental implants. However there is only little data on the minimal number of implants necessary for a sufficient stabilization. Aim of this study is to analyse the improvement of quality of life according to the masticatory quality depending on the number of inserts implants.

Methods: In 8 edentulous patients 3 implants each (Camlog Isy©) were inserted in the middle and in the canine region. After 10 week of transgingival healing the overdenture was stepwise stabilized by the implants (for 3 months 1 Implant, next 3 months 2 Implants and finally 3 Implants). The quality of life (OHIP 14; min. 0 points, max. 56 points) and a analogue rating scale for mastication quality (ARSM) (min. 5 points; max. 50 points) was measured before and during this procedure plus the patients underwent a mastication test with multi-colored gums.

Results: 8 patients (2 ♂, 6 ♀) with average age of 71y (min 50y, max. 80y) received 24 implant in total. The follow up time was minimum 1y with an implant survival rate of 100%. All patient show a significant improvement according to OHIP, ARSM and mastication test with the increasing number of implants.



Conclusions: Due to the implant-supported stabilization of dentures the chewing ability and quality of life can be improved. However the benefit is depending on the number of implants which are stabilizing the overdenture.

10 chewing cycles

20 chewing cycles

40 chewing cycles

