

OP01 PREVALENCE AND MAGNITUDE OF RECESSIONS DURING AND AFTER HERBST-MULTIBRACKET TREATMENT – AN ANALYSIS OF 492 CONSECUTIVE CLASS II DIVISION 1 CASES

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**AIM:** To assess the prevalence and magnitude of gingival recessions (GR) during and after Herbst-multibracket (Herbst-MB) treatment (Tx) in Class II division 1 patients.

**SUBJECTS AND METHOD:** All Class II division 1 patients who completed Herbst-MB Tx between 1986 and 2014. Study casts from before Tx, after Herbst-MB Tx and (if available) after at least 24 months of retention were evaluated regarding the prevalence of GR. The evaluated teeth were summarized in six groups: incisors (UI/LI), canines and premolars (UCP/LCP) and molars (UM/LM).

**RESULTS:** A total of 492 Class II division 1 patients with a mean pre-Tx age of 14.4 years (range: 9.8-44.4) were included. Tx consisted of a Herbst phase (mean 8.1 months) and a subsequent MB phase (mean 16.1 months). Data from  $\geq 24$  months of retention (mean 32.6 months) were available for 232 patients. The prevalence for GR  $>1$  mm ranged between 0-0.5 per cent before Tx and between 0.2-1.2 per cent after Herbst-MB. GR  $>2$  mm were not seen. After retention the prevalence of GR  $>1$  mm ranged between 0.0-2.8 per cent and GR  $>2$  mm between 0.0-0.4 per cent. The incidence of recession was neither related to Class II severity nor to skeletal maturity. At all observation times the prevalence was highest for the lower incisors (0.5/1.1/3.2%).

**CONCLUSIONS:** As a result of Herbst-MB Tx, the prevalence of teeth with GR  $>1$  mm increased from 0.2 per cent before Tx to 1.4 per cent after retention. The highest prevalence of recessions was found for the lower incisors after retention (3.2%).