

OP39 ORAL CANDIDA CARRIAGE IN PATIENTS WITH MULTIBRACKET APPLIANCES AND WHITE SPOT LESIONS

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AIMS: To investigate the oral microbiota [especially *Candida*, *Streptococcus mutans* (*S. Mutans*) and *Lactobacilli*] in patients with multibracket appliances in relation to the quality of oral hygiene.

MATERIALS AND METHOD: Salivary and plaque samples were collected from 75 patients, divided into three groups of 25 patients each (good oral hygiene, poor oral hygiene and poor oral hygiene with development of new white spot lesions (WSL). Counts of colony forming units (CFU) and species of candida were analyzed. Group differences were tested with Chi-square- and Mann-Whitney-U-tests.

RESULTS: Both salivary and plaque samples showed a high prevalence of candida. In the saliva samples, 73.4 per cent of all patients were candida carriers, while in the plaque samples a prevalence of 60.9 per cent was detected. For the salivary samples, a statistically significant difference in the amount of CFU was found between the groups with good and poor oral hygiene ($P = 0.045$) and between groups with good oral hygiene and newly developed WSL ($P = 0.011$). The main candida species was *C. albicans*. *S. mutans* and *Lactobacilli* were found in salivary and plaque samples of all patients. For the salivary samples, a statistically significant difference in the amount of *Lactobacilli* was found between the groups with good oral hygiene and newly developed WSL ($P = 0.047$).

CONCLUSION: Patients developing new WSL during multibracket appliance treatment show by trend, but not consistently higher counts of *Candida* and *Lactobacilli* compared to patients with good oral hygiene.