

OP24 TRAJECTORIES OF ORAL HEALTH-RELATED QUALITY OF LIFE IN STANDARD, CLEFT AND SURGERY PATIENTS: A PROSPECTIVE CROSS-SECTIONAL STUDY

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AIMS: While the short-term impact of orthodontic treatment on oral health-related quality of life (OHRQoL) is well documented, there is limited data regarding the stability of such changes over time. The purpose of this study was, therefore, to assess long-term changes and describe trajectories of OHRQoL in a cohort of cleft, surgery and standard patients who received orthodontic treatment.

SUBJECTS AND METHOD: A cohort of 59 orthodontic patients were administered the Oral Health Impact Profile (OHIP-14) at baseline (T0), immediately post-treatment (T1), and approximately 5-years post-treatment (T2). OHRQoL trajectories for standard, cleft and surgery patients were determined by comparing OHIP-14 scores at the three time-points. All orthodontic treatment was carried out by one of the authors.

RESULTS: The study sample consisted of 17 standard (28.8%), 19 cleft (32.2%) and 23 surgery patients (39.0%). The mean age of the patients at T0 and T2 was 15.6 ± 4.3 and 23.6 ± 4.2 years, respectively. The mean dental aesthetic index score in the sample was 49.3 ± 12.9 , indicating a high degree of malocclusion severity. An overall reduction in OHIP-14 scores occurred after orthodontic treatment (T1), although this was only significant in the surgery and standard groups ($P < 0.05$). There was no significant change in OHIP-14 score between T1 and T2 in the three patient groups ($P < 0.05$). Relative to baseline, however, there was a significant reduction in mean OHIP-14 score at T2 in the standard (-24.2% ; $P < 0.05$) and surgery groups (-57.4% ; $P < 0.05$), indicating an improvement in OHRQoL. In contrast, the mean OHIP-14 score of cleft patients significantly increased by 40.2 per cent ($P < 0.05$). Using a mixed model analysis, a significant interaction was detected between time (i.e. study time-point) and patient group ($F = 6.0$; $P < 0.0001$), after adjusting for age and gender ($F = 0.6$; $P = 0.434$).

CONCLUSION: Distinct patient groups show different OHRQoL trajectories following orthodontic treatment. Treatment-related improvements in OHRQoL are maintained over time for standard and surgery patients, but not for those with orofacial clefts. In fact, the latter show significant deterioration in OHRQoL with time.