

Transverse interdental arch outcomes of 5-Year-Olds born with a UCLP following changes in cleft services within the United Kingdom

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1. Title:

An investigation into transverse interdental arch outcomes of 5-Year-Olds born with a UCLP following the centralisation of cleft services within the UK.

2. Purpose/Aim of proposed investigation:

To investigate the transverse interdental arch relationship outcomes of 5-year-old children with unilateral cleft lip and palate (UCLP) treated before and after the centralisation of cleft services in the UK.

3. Design and Setting:

Retrospective cross-sectional study with analysis of 3D orthodontic study models using the modified Huddart-Bodenham Index (HBI).

4. Participants:

Scanned plaster models from all available 5-year-old participants from the CSAG (n=140) study (before centralisation) and Cleft Care UK (CCUK n=199) study (after centralisation).

5. Outcomes:

Differences between the transverse interdental arch relationship outcomes for the CSAG and CCUK cohorts will be assessed using the modified HBI. This index comprises 8 numerical scores of the interdental relationships both anteriorly and posteriorly on the cleft affected and unaffected sides. This will provide a cumulative score ranging from -24 to +8 for each set of models in the primary dentition. The cumulative scores will facilitate a comparison between CSAG and CCUK outcomes.

6. Significance of this study:

Many improvements in outcomes have been reported following the centralisation of cleft care, including interdental arch relationships. However, the assessment of transverse interdental arch relationships has not been specifically investigated and the findings will add to the existing data on outcome comparisons following centralisation