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### F - 06 : A PROPOSED CLASSIFICATION FOR INTERPROXIMAL CONTACTS OF PRIMARY MOLARS

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**Introduction:** Contact areas in primary teeth are known to be broader, flatter, and situated more gingivally compared with those in permanent teeth. The objective of the present study was to evaluate the different types of intact contact areas in primary teeth using Cone Beam Computed Tomography (CBCT) among children. This study is the first to undertake a three-dimensional investigation of the contact areas in primary teeth.

**Methodology:** A cross-sectional study was designed with 296 contacts from 74 existing CBCT images of patients aged between 3-14 years obtained from a private scan centre. The shape of the contact area was observed at three levels, namely, coronal, middle, and apical thirds, in the three different sections of CBCT,

i.e., axial, coronal, and sagittal by two calibrated examiners. The weighted Cohen's kappa value for inter-examiner reliability was 0.893 at baseline. Prevalence of the types of contact areas was expressed in the form of numbers and percentages.

**Results:** Results exhibited four different types of contact areas between primary molars, namely, O (open) type, X (point contact) type, I (straight contact) type, and S (curved contact) type, based on the shapes observed. The most common pattern seen was I (66.2%) and the least common was S (2.7%). When the right- and left-side contacts of the molars were compared using chi-square test, a significant difference was observed in the maxilla ( $P < 0.05$ ).

**Conclusion:** In summary, the intact interproximal contact areas between primary molars are of four types and is predominantly present at the occlusal level.

**Keywords:** deciduous tooth, dental caries susceptibility, dental plaque, classification, cone-beam computed tomography, proximal contacts