



**EVALUATION OF PARENTAL NASOMAXILLARY
ASYMMETRY AS A RISK FACTOR FOR DEVELOPMENT OF
PALATAL CLEFTS IN THEIR OFFSPRINGS**

by

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ABSTRACT

Background and Objectives: It has been suggested previously that increased width of midfacial structure is associated with development of palatal clefting. One of the most important heritable characteristics predisposing towards the development of orofacial clefting in an embryo is craniofacial morphology. The aim of the study was to compare nasomaxillary width of parents of children with unilateral complete cleft lip alveolus and palate with parents of non-cleft children.

Methods: 25 biologic parent set of children with unilateral complete cleft lip alveolus and palate and 25 biologic parents of non-cleft children were included in this study for PA cephalometric analysis.

Results: There was no statistically significant difference between study and control groups. A association was found between the side of the cleft in the affected children and the parents in the same side with narrower nasomaxillary width.

Interpretation and conclusion: The result of this study was in contrast with other previous studies. We observed a narrower nasomaxillary width which suggested that this feature may be of morphogenetic importance in the aetiopathogenesis of orofacial clefting in this geographic and ethnic group.

Keywords: *Nasomaxillary asymmetry; Orofacial clefting; PA cephalometric analysis; craniofacial form.*