Am J Orthod Dentofacial Orthop. 1998 Jun;113(6):603-11. ELSEVIER Links

Nasal obstruction and facial growth: the strength of evidence for clinical assumptions.

Vig KW.

Department of Orthodontics, College of Dentistry, The Ohio State University, Columbus, USA.

The orthodontic relevance of nasorespiratory obstruction and its effect on facial growth continues to be debated after almost a century of controversy. The continuing interest in nasal obstruction is fueled by strong convictions, weak evidence, and the prevailing uncertainty of cause and effect relationships that exist. The essence of any debate is to provide opposing evidence from which a majority vote is obtained. Political issues may be appropriately resolved by such means as a majority vote. Scientific issues, however, can only be resolved by data and appropriately structured hypotheses put to the test. One of the problems in debating nasorespiratory obstruction and facial growth is the inability to provide unequivocal answers to such issues as: How much nasal obstruction is clinically significant? At what age is the onset critical and for how long does it have to exist before an effect on facial growth can be expected? To provide unequivocal answers, clinical studies need to be designed to identify and quantify the degree of nasorespiratory obstruction and compare individuals for any clinically relevant differences. The purpose of this article is to review the available evidence. If both data and untested popular beliefs are subjected to the same rigorous criteria, indications for the orthodontic management of patients with nasorespiratory obstruction may gain a more rational approach to treatment recommendations.

PMID: 9637562 [PubMed - indexed for MEDLINE]