LETTER TO THE EDITOR

Aetiology of bifid condyle

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In reference to the article “The frequency of bifid mandibular condyle in a Turkish patient population” published in *Dentomaxillofacial Radiology*,¹ I wish to congratulate the authors for an informative study. Bifid mandibular condyle is a rare abnormality of unknown aetiology. The authors took great effort in mentioning multiple aetiologies of bifid condyle, for example, endocrine disturbances, exposure to teratogens, nutritional deficiencies, infection, radiation, trauma and genetic induced. In addition to the numerous aetiological factors described in the article I wish to elaborate some theories not mentioned.

Poswillo et al² suggested that it occurs as a result of changes in the position or form of the disc, leading to the formation of intraarticular septa across the joint space. This, in turn, influences the pattern of condylar regeneration. Post fracture healing and remodelling of the mandibular condyle, if they involve lateral and medial fragments, have also been linked to the development of ankylosis or bifid mandibular condyle. Szentpetery et al³ stated that the site of fracture and, most probably, its relation to the insertion of the lateral pterygoid muscle may determine future development of a normal or bifid condyle. Gundlach et al⁴

experimentally induced bifid condyles in animals by injecting teratogenic substances such as, *N*-methyl-*N*-nitrosourea and formhydroxamic acid in different concentrations at various stages of pregnancy. In addition, some reports of bifid mandibular condyle have established a relationship between the origin of the condition and the glenoid fossa. In developmental bifid mandibular condyle there is a separate glenoid fossa for each of the two parts, while in traumatic bifid mandibular condyle there is only one glenoid fossa.⁵ I hope these further possible explanations of the various theories adds to our knowledge of bifid condyle.

PP Jaju

*MGV KBH Dental College and Hospital
Nashik
Maharashtra
India*

E-mail: docprashant_jaju@yahoo.com

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