



International Journal of Medicine

ISSN (P): 1468-3814; ISSN (e): 2667-7008

<https://www.theinternationalmedicine.com>

Volume: 2(1) 2020



Clinical Image

Rare osseous bridging of the mandible and its clinical significance

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Received: 30 December 2020 / Accepted: 10 March 2020

Mylohyoid bridging (MB) is an anatomical variation, which is seen in 0.47-32.20% of cases [1]. Nevertheless, the majority of authors demonstrate that the incidence is approximately 5-10%. Since the incidence varies in a wide range, it may be a population-specific anatomical variation [1].

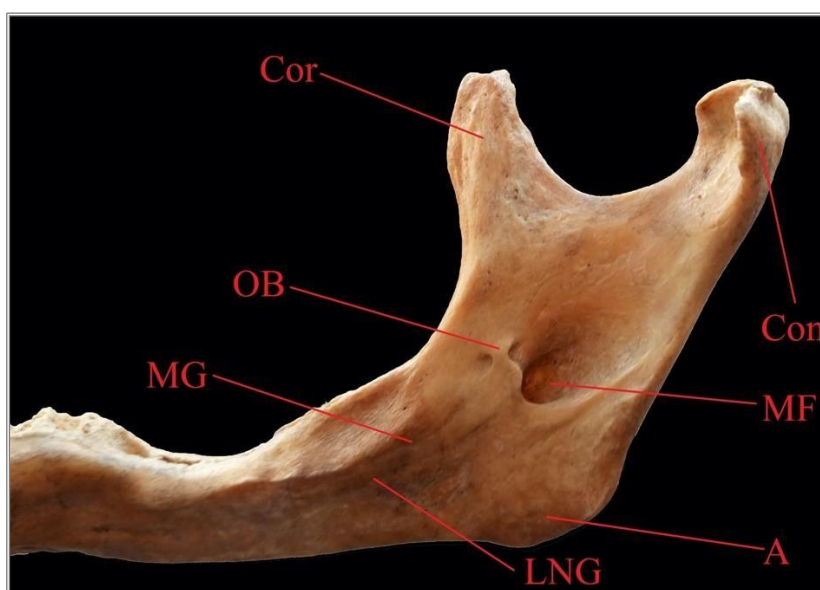


Figure 1. Osseous bridging of the mandible. Cor: Coronoid process, Con: Condylar process, OB: Osseous bridging, MF: Mandibular foramen, A: Angle of the mandible, LNG: Lingual nerve groove, MG: Mylohyoid groove.

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DOI: 10.5455/im.80003

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There are generally two types of MB - proximal and distal, although other terms also exist such as common–uncommon, bridge–lingular [2,3]. In type I MB the canal is formed due to the ossification of the periosteum over the mylohyoid groove, whereas type II is formed as a result of the ossification of the sphenomandibular ligament. The type II MB appears like a backward extension of the lingula. MB can cause compression of the mylohyoid neurovascular bundle against the bone leading to clinical symptoms. In the case of large sphenomandibular ossification, there can be other symptoms as restricted mouth opening [4]. In the present case, the mandible had a bony bridge, which projected anterosuperiorly from the lingula, leaving a small 3 mm wide canal [Figure 1]. The mandible had two grooves on its surface: the mylohyoid groove (the lower part of the mandibular foramen, running obliquely downward) and the lingual nerve groove (ran parallel to the mylohyoid groove). The bony bridge had a forward direction, unlike the classical type II MB. Ossification of different ligaments is not uncommon and can be seen in different regions of the body [5]. Their ossification typically causes compression of the structures, which run within the created canal. The symptoms usually are related to compression of the nerve. In case of a unilateral compression of the mylohyoid nerve, the symptoms may include poorly localized deep pain in the region of the muscles that it innervates (mylohyoid muscle and posterior belly of the digastric muscle). Prolonged compression may result in muscular atrophy or paresis. Finally, bilateral entrapment may lead to swallowing difficulties due to muscle dysfunction. In case the lingual nerve is entrapped, this can lead to numbness, hypoesthesia/anesthesia and loss of taste sensation of the tongue. Such anatomical variations are rare and should be considered in dentistry, neurology and craniofacial surgery.

Conflict of interest

The authors declare no conflict of interest.

Funding

The authors declare no financial support.

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