

The myloglossus muscle: anatomical and clinical observations

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The myloglossus muscle is considered an anomalous muscle among the extrinsic muscle of the tongue. In the past, only few Authors provided an anatomical description of the myloglossus muscle (Valenti, 1925; Jude, 1973; Gruber, 1980) and recently a description of myloglossus muscle in Japanese cadaver was reported (Nakajima and Nakamura, 2008).

Dissection studies showed that the myloglossus muscle arises from the inner surface of the mandible between the alveolar process and the distal part of the mylohyoid groove and inserts into the tongue root, joining the palatoglossus muscle. Some anatomical variations regarding its origin could be present: it could originate from stylomandibular ligament or partially replace the styloglossus muscle.

In patients, with discrete muscle trophism, the myloglossus muscle provides a lateral to medial mucosal fold in the posterior portion of the sublingual sulcus that is evident when the tongue is controlaterally moved. On the contrary, in patients with poor muscle trophism these mucosal folds were not observed.

The myloglossus muscle acts primarily as an antagonist of both the controlateral muscle and other muscles that move the tongue toward the opposite side; moreover, it acts together with the controlateral and the palatoglossus muscle, determining the upward movements of the tongue and pharynx, especially in the last phase of deglutition.

Its location should be considered to well determine the distal lingual extension of the removable prosthesis.

Gruber W. 1880. *Über den musculus myloglossus bei mangel und vorkommen des styloglossus.* Arch Path Anat Physiol Klin Med 81:453-457.

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Nakajima K, Nakamura M. *Rare case of myloglossus in Japanese cadaver: anatomical and developmental considerations.* Anat Sci Int. 2008; 83: 1-5

Valenti G. 1925. *Sur un muscle mandibulo-glosse (M. Mylo-Glossus Wood).* Arch Ital Biol 75: 77.

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