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LETTER TO THE EDITOR

Muscle attachment to the condylar process of mandible: anatomical considerations

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We read with much interest the interesting article entitled 'An anatomic study of the attachments on the condylar process of the mandible: muscle bundles from the temporalis' by Sakaguchi-Kuma et al. [3]. At this juncture, we wish to share our scientific views on this published article.

The methods used by the authors are praiseworthy. No inclusion or exclusion criteria were mentioned in the study. It may be mentioned that presence of otological or neurological disease, or any history of past trauma or past surgical history may influence the muscle fibre alignment and it is mandatory to consider such. There are reports that condylar hypoplasia may also change the muscle tonus [1].

The average age of the cadavers was 79.3 years which means the subjects were very old. An important aspect to consider is the hardness of the food which was consumed by the deceased. With increase in age and hardness of food, the muscle architecture may change accordingly. A research study reported the fact that human jaw muscles have unique fibre type and undergo region-specific changes with increase in age [2]. All these facts should have been highlighted in detail.

It was interesting to note three references being cited in the results section which is otherwise not a common phenomenon. A thorough discussion of the embryological reasons for the temporalis muscle fibre variations may bear much importance.

The authors describe that the muscle insertion may correspond to the shape of the bone which is again a debatable fact. In fact a strong mechanical pull by a muscle results in formation of any ridge or bony elevations in any bone. An example is the gluteus maximus muscle which produces the prominent gluteal tuberosity. Biomechanics of the muscle with regard to present findings should have been elaborated in detail.

Overall, it is an interesting article. We congratulate the authors for the meticulous study and thank the editor for publishing such an interesting study with clinical implications.

Compliance with ethical standards

Conflict of interest None to declare.

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