Dental anatomy

Deep masseteric layer

Sir, traditionally the masseter muscle was considered to be bilayered, consisting of superficial and deep layers.[1] Recently, Mezey *et al.* at the University of Basel discovered a third deeper layer of the masseter muscle (*Musculus masseter pars coronidea*) in a cadaveric study.[2] They noted that this layer originates on the zygomatic process of the temporal bone, running anteromedially attaching at the base and the posterior margin of the coronoid process of the mandible. It is supplied by the masseteric nerve and artery supporting the common origin of these layers. Although the exact independent function of this muscle is unknown, it is likely that it helps in retracting the mandible due to its oblique angulation as opposed to other layers which elevate the mandible.

A 65-year-old patient presented with progressively worsening pain of the left face and jaw-locking for prolonged periods of the day. Examination revealed palpable swelling over the right TMJ and parotid region.

Fig. 1 Right condylar synovial osteochondromatosis

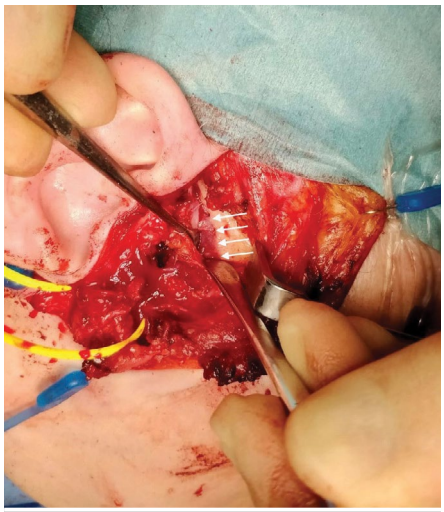

Fig. 2 Deep layer of masseter muscle (white arrows)

Multiple cross-sectional imaging revealed a calcified mass lesion posterior to the right mandibular condyle suspicious of synovial osteochondromatosis (Fig. 1). A preauricular approach with temporal extension was planned and executed to access this tumour. The deeper layer of masseter was noted during dissection and a pictorial description is presented here (Fig. 2).

A. Tufail, S. Pullan, A. Amini, D. Komath, London, UK

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Infection control

Monkeypox

Sir, recent reports of infection with the Monkeypox virus via community transmission in the United Kingdom (UK) have prompted me to question the impact this could potentially have on dentistry.[1] According to the Centers for Disease Control and Prevention (CDC), Monkeypox is a rare virus belonging to the *Orthopoxvirus* genus.[2] Since first being discovered in humans in 1970, the virus has been reported in central and western African countries, the United States, Israel, Singapore and the UK. Currently, the natural reservoir of Monkeypox is unknown.

Monkeypox virus enters the body through broken skin, the respiratory tract or through the mucous membranes of the eyes, nose, or mouth. Human-to-human transmission primarily occurs through respiratory droplets during periods of prolonged face-to-face contact and via indirect contact with lesion material through contaminated clothing.

Those infected with Monkeypox initially experience fever, headache, muscle aches, lymphadenopathy and exhaustion. Within three days, a spreading bodily rash develops, often beginning on the face. Incubation period of the virus can range from 5–21 days. Awareness of the signs and symptoms amongst the dental profession needs to be reinforced. Given the nature of our work, we are in a position to remain vigilant to the early signs of a facial rash amongst patients. The large volume of aerosol generated procedures we undertake in dentistry places us at higher risk of becoming infected with the virus due to the mode of transmission. In recent weeks, guidelines around the use of personal protective equipment (PPE) and social distancing have changed in relation to the COVID-19 pandemic. However, the CDC state that prevention of Monkeypox virus transmission is aided by self-isolation, meticulous hand hygiene and the use of PPE. Due consideration needs to be given to the fact that if reported cases increase, re-implementation of these protective measures may be necessary amongst healthcare staff.

Currently, Monkeypox may not be a cause for major concern but it is imperative we remain vigilant as the lessons we learned from the COVID-19 pandemic cannot be forgotten.

S. Murphy, Dumfries, UK

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Evidence-based dentistry

PRISMA 2020 updated guideline

Sir, we would like to inform the readers of an update to the PRISMA 2009 statement,[1] which was referenced in the article submitted by Alkadhimi *et al.* in January 2021 and accepted for publication in April 2021.[2] The PRISMA 2020 statement[3] replaces the 2009 statement[1] and was published in March 2021. It includes new reporting guidance for systematic reviews that reflects advances in methods to identify, select, appraise and synthesise studies.

The updated statement consists of an improved 27-item checklist, the PRISMA 2020 abstract checklist and revised flow diagrams for original and updated reviews. This letter aims to inform on the most noteworthy changes, including the need to include full search strategies for all databases, where previously the recommendation advised at least one database. In addition, under study selection, there is now an emphasis on detailing the reviewers involved. This includes the total number of reviewers and if any automated tools were used.