

A case of buccal abscess; originating from an ectopic accessory parotid gland?

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Abstract

We report a case of an abscess from an 'ectopic' accessory parotid gland in the cheek demonstrated by sialography and computed tomography (CT). The accessory parotid gland was ectopically located anterolateral to the masseter muscle and isolated from the main parotid gland. The orifice and ductal system of the ectopic accessory parotid gland were separated from those of Stensen's duct. The abscess developed from this ectopic accessory gland, and the main parotid gland was free of inflammation. Using sialography and CT, we confirmed the presence of this ectopic accessory gland.

Key words: Mouth; Parotid Gland; Tumour; Ectopic Tissue

Introduction

Evaluation of an abscess in the mid-cheek region can be a difficult task, and a high index of suspicion of the site of origin is required when evaluating the mid-cheek lesions. There was little organ/tissue in this area where an abscess may arise. Thus the origin of the cheek abscess may not be evident. Although an accessory parotid gland is a common variation, an abscess arising from an 'ectopic' accessory parotid gland is rare and its origin cannot readily be suspected. This report presents a case of an abscess from an ectopic accessory parotid gland and concentrates on the diagnosis and management of the cheek abscess.

Case report

A 43-year-old man presented with a painful swelling of the left cheek of one week's duration. He had a history of chronic alcoholic liver disease. The swelling developed spontaneously without a trauma history, had grown slowly for one week and was complicated by pain, local heat, and redness. It was approximately 4 cm in diameter. Clinical examination showed an opening located at the oral mucosa 0.5 cm anteroinferior to the orifice of Stensen's duct (Figure 1). Some pus drained from the opening.

A CT scan showed an abscess cavity anterolateral to the masseter muscle. The margin of an abscess cavity was strongly enhanced, and irregularly enhanced soft tissue was found around the abscess. This soft tissue was isolated from the left parotid gland (Figure 2).

The aspiration was repeated on several occasions and antibiotics were injected intravenously. Culture of the pus revealed *Streptococcus* as the causative micro-organism. After the infection had subsided, some saliva pooled in the abscess cavity. A sialogram was performed to evaluate the duct system and confirm the development of the sialoceles. This study showed that the ectopic accessory parotid gland's duct was separated from the main Stensen's duct (Figure 3). The sialoceles were improved by repeated aspiration and compression. Surgical excision of the

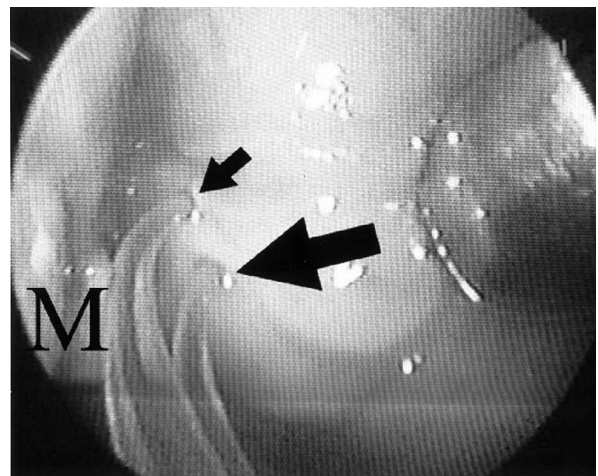


FIG. 1

Oral findings; this picture shows the orifice of Stensen's duct (small arrow) and the ectopic accessory parotid gland (large arrow) at approximately the level of the second maxillary molar (M). These two orifices were cannulated for the sialography.

ectopic accessory gland was performed and permanent pathologic examination revealed tissue consistent with the parotid gland.

Discussion

Despite surgeons' fascination with the challenges and elegance of parotid surgery, there is a paucity of information on an ectopic accessory parotid gland in routine discussions of salivary gland or mid-cheek mass management. Although accessory salivary glands are mentioned relatively commonly throughout the literature, there is little said about the presence of 'ectopic' (aberrant)



FIG. 2

CT findings; the contrast-enhanced CT shows an abscess cavity (small arrow) in the soft tissue (large arrow), which is moderately enhanced and located anterolateral to the masseter muscle (M). This soft tissue was separate from the left parotid gland.

salivary tissue arising separately from the main parotid gland.^{1,2}

The accessory variant was generally defined as salivary tissue that is anterior and truly anatomically separate from the main parotid along Stensen's duct.^{3,4} It was known to typically occur along the central one-third of a diagonal line extending from the tragus to a point midway between the ala of the nose and the vermilion border of the upper lip.³⁻⁵ These variants are known to be connected to Stensen's duct, but some cases have separate ductal systems.^{6,7} So I think that 'ectopic accessory' parotid gland is a more appropriate term than accessory parotid gland if there is a separate ductal system and opening as in this case. The prevalence of a normal accessory parotid gland in the population was reported to be around 20 per cent; up to 56 per cent in some reports.^{2,4,5} In its normal glandular state, it is likely that this anatomical salivary variant would go unnoticed on routine examination. Both infection and neoplasms, however, may occur in this accessory salivary tissue, resulting in a noticeable 'lump' on the mid-cheek.²

A high index of suspicion is required when the clinician evaluates mid-cheek lesions. The diseases of the accessory parotid lobe can easily be misdiagnosed as more common diagnoses, and failure to consider that the lesion may be of salivary origin may result in a disastrous outcome when a direct approach is chosen. This condition is especially true when the lesion is an abscess. The wrong surgical approach may result in many complications; facial paralysis, salivary fistula/sialocele, and recurrence. So proper evaluation (FNA biopsy/cytology and CT scan) and treatment were required.^{7,8}

This case report describes an abscess originating from an ectopic accessory parotid gland and aims to give the reader an appreciation of the proper diagnosis and treatment of

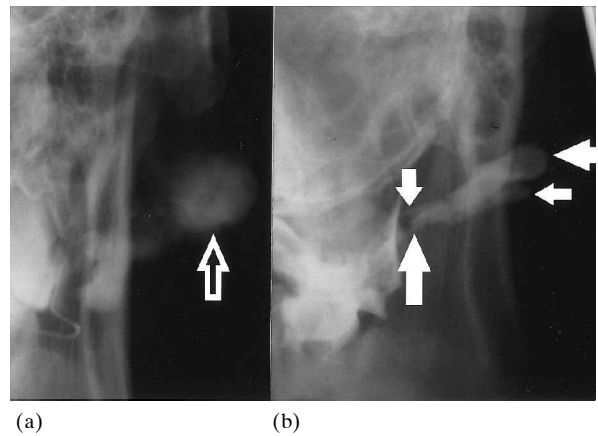


FIG. 3

Sialogram; (a) shows a sialocele (blank arrow) which is developed from previous abscess cavity. (b) shows that there is a separation between Stensen's duct (small arrow) and the duct of the ectopic accessory parotid gland (large arrow).

these rare lesions of the not-so-rare anatomical variant called an ectopic accessory parotid gland. Furthermore, our aim is to point out the similarity with which other, non-salivary diagnoses may present in the mid-cheek region and how important this distinction becomes in the treatment.

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