LETTER TO THE EDITOR

Parotid necrotizing sialometaplasia vs infarcted Warthin tumour

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Tsuji et al¹ recently reported an extremely well-documented case of an unusual parotid tumour demonstrating necrosis and squamous metaplasia. They interpreted it as necrotizing sialometaplasia, but they considered infarcted Warthin tumour in their differential diagnosis.

The definitive diagnosis rests on histopathological evaluation. In figure 6b, Tsuji et al¹ provide a photomicrograph exhibiting a cystic lumen containing eosinophilic necrotic cellular material (lower left) and a granulation tissue wall showing a papillary intraluminal process and a lining of metaplastic stratified squamous epithelium. These histological findings are fully consistent with a metaplastic Warthin tumour and are similar to features depicted in cases reported by Kato et al² (figure 1f), Yerli et al³ (figure 1f) and Di Palma et al⁴ (figure 5a). Cystic change and intracystic necrotic debris are foreign to typical necrotizing sialometaplasia but characteristic of metaplastic Warthin tumour. Pathologists generally disregard such necrotic debris as devoid of diagnostic significance; however, it can occasionally contain fragments of palisaded eosinophilic columnar cells without nuclei (necrotic oncocytes) resembling a “stack of bricks”, a finding supportive of infarcted Warthin tumour.

The parotid mass reported by Tsuji et al¹ additionally demonstrates CT and MRI features similar to those previously reported as metaplastic/infarcted Warthin

tumour. For example, Tsuji et al¹ present a CT image of a poorly margined mass (figure 3), which is similar to that of the altered Warthin tumour depicted in figure 1B of the Yerli et al³ study. Similarly, MR images in reports by Tsuji et al¹ and Yerli et al³ both illustrate an encapsulated mass showing intratumoral irregularly shaped hyperintense areas.

The hypothesis that a pre-existing encapsulated tumour underwent ischaemic necrosis (infarction) seems more tenable than the proposition that a parotid ischaemic event rapidly resulted in an encapsulated spherical mass. Oncocytic tumours (termed Hürthle cell tumours in the thyroid) have a recognized predisposition to undergo spontaneous ischaemic necrosis, and Warthin tumour (synonymously termed oncocytic papillary cystadenoma lymphomatosum, an oncocytic neoplasm) is the second most common parotid tumour (after pleomorphic adenoma). Approximately 10% of Warthin tumours infarct following fine-needle aspiration biopsy.⁵ Therefore, the possibility that the lesion reported by Tsuji et al¹ could be an infarcted Warthin tumour deserves serious consideration.

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