CASE REPORT

Unilateral Warthin's tumour in a patient of Afro-Caribbean descent

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Accepted 15 May 2014

SUMMARY

Warthin's tumours are the second most common benign tumours of the parotid gland. The authors report the case of a 40-year-old man of Afro-Caribbean descent who presented with a painless mass at the angle of the right mandible. It was an incidental finding while shaving and was not associated with any symptoms. Arrangements were made for him to undergo an ear, nose and throat (ENT) evaluation. Axial contrast-enhanced CT of head and neck region revealed a well-defined cystic lesion. Fine-needle aspiration cytology was inconclusive. Right superficial partial parotidectomy was performed to remove the lesion. Histological examination confirmed a diagnosis of a Warthin's tumour.

BACKGROUND

Warthin's tumours (cystadenolymphoma/papillary cystadenolymphomatosum) are the second most common benign tumours of the parotid gland after pleomorphic adenomas.¹ These tumours represent between 10% and 15% of all parotid tumours.¹

These tumours usually present as asymptomatic, slow-growing masses in predominantly male patients (10 : 1) in their fifth or sixth decades of life.² Malignant transformation is rare.^{1 2} The pathogenesis is unknown, but there is a strong association with cigarette smoking.^{2 3} It is rarely described in black patients, with Pinkston and colleagues quoting an incidence of 4% in a series of 682 cases.^{3 4} No published reports could be found on it occurring within Afro-Caribbean patients.

We report the case of a black man of Afro-Caribbean descent, who was diagnosed with a Warthin's tumour following superficial parotidectomy.

CASE PRESENTATION

The case is of a 40-year-old Afro-Caribbean man, who is lifetime non-smoker and non-drinker of alcohol. He was referred to department of ENT (ear, nose and throat) with an incidental finding of swelling of the right parotid gland while shaving. There was no personal or family history of malignancy. He had no associated reports of pain, facial or trigeminal symptoms. B symptoms (drenching night sweats, weight-loss and fever), overseas travel and the presence of domestic animals were denied.

INVESTIGATIONS

Physical examination revealed unilateral right-sided painless mass at the angle of the mandible, which was moveable and not attached to skin or deeper tissue. Contrast-enhanced CT revealed an 18×14 mm well-defined lesion in the inferior

Figure 1 Axial contrast-enhanced CT of the head and neck (red circle around area of abnormality).

aspect of the right parotid gland. It was solitary. No evidence of enlarged locoregional lymphadenopathy was apparent. The mass showed enhancement after the administration of intravenous contrast (see figures 1 and 2). Because of the

Figure 2 Coronal contrast-enhanced CT of the head and neck (red circle around area of abnormality).

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To cite: Quintyne KI, Wallis F, Healy V, et al. *BMJ Case Rep* Published online: [please include Day Month Year] doi:10.1136/bcr-2014-204813

patient's claustrophobia MRI was not undertaken. Haematological and biochemical blood tests were normal.

DIFFERENTIAL DIAGNOSIS

- ▶ Benign and malignant tumours
- ▶ Sarcoidosis
- ▶ Sialolithiasis
- ▶ Sialoadenosis
- ▶ Wegener's granulomatosis
- ▶ Tuberculosis

OUTCOME AND FOLLOW-UP

Right superficial parotidectomy was performed. Histological evaluation revealed a Warthin's tumour with no evidence of malignancy seen (see figure 3).

DISCUSSION

Salivary gland tumours are relatively uncommon, and account for less than 10% of all head and neck tumours.⁵ Of all salivary gland tumours 75% occur in the parotid gland.⁵ Warthin's tumours are considered to be benign neoplasms, which were first described by Aldred Warthin in 1929.⁶ They represent approximately 10–15% of all parotid tumours.^{1 6} However, less than 10% of cases have been reported outside the parotid.⁶ From published literature, 5–15% of cases were bilateral and 6–20% are multifocal.^{2 7} The aetiology is not fully understood, and its classification as a cancer is controversial.⁸ Smoking, increasing age and male gender have been considered risk factors for the development of Warthin's tumours.^{2 4 6} It is rarely described in non-Caucasian individuals.⁴

Following a thorough history and clinical examination, undertaking radiological evaluation is the next crucial step. This can be undertaken in combination of the following (1) ultrasonography, (2) CT or (3) MRI. In this case, a CT scan was the only radiological evaluation performed. It revealed a heterogeneous unilateral well-circumscribed parotid mass. MRI can offer further information on the architectural extent of the lesion. It was not performed in this case, as there was no evidence on CT

to suggest extra-parotid extension or invasion and also in respect to the patient's claustrophobia.

Histological sampling is required to confirm the diagnosis. Fine-needle aspiration cytology was undertaken and proven to be inconclusive, but definitive surgical resection allowed for the establishment of the diagnosis.⁸ Surgery is typically associated with a low recurrence rate.⁹ There has been review of this in the literature, and recurrence has been postulated to be related to the extent of surgery performed, with quoted levels of up to 13%.¹⁰ The most common complications described following parotid surgery include facial nerve dysfunction and Frey's syndrome.¹⁰ Facial nerve dysfunction may be transient (10–68%) or permanent (0–19%) in nature.¹⁰ The incidence of dysfunction is reported as being higher in cases having extensive parotidectomy or diabetes mellitus.¹⁰ Frey's syndrome (ie, gustatory sweating) can be detected later, and may or may not be symptomatic. Reports have suggested that this complication occurs in 10–40% of patients undergoing surgery of the parotid gland.^{6 10}

We report this case because of its rarity.

Learning points

- ▶ Warthin's tumours are the second most common benign tumours of the parotid gland, the aetiology of which is not clearly understood.
- ▶ Risk of malignant transformation is low.
- ▶ They are rarely described in black populations, and are even fewer in Afro-Caribbean persons.
- ▶ Surgical resection is the main treatment option and is associated with (1) low recurrence rates and (2) low complication rates.

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

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Figure 3 Specimen showing Warthin's tumour with H&E stain, showing prominent lymphoid stroma and large epithelial cells with oncofocytic features covering it.

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