Recurrent Warthin's tumour of the larynx

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ABSTRACT

Warthin's tumours, or adenolymphomas, present commonly as masses of the parotid glands and salivary tissue. However, in the existing literature, few cases of laryngeal adenolymphomas are described. We report the case of a 60-year-old woman with a recurrent right-sided laryngeal adenolymphoma, and discuss the difficulties in diagnosis and management.

KEYWORDS

Larynx – Neoplasm – Warthin's – Adenolymphoma – Recurrence

Accepted 11 January 2015; published online XXX

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Known eponymously as Warthin's tumours, adenolymphomas are a benign salivary neoplasm, which consists of oncocytic epithelial cells and lymphoid stroma containing lymphoid follicles with reactive germinal centres.¹ They are usually found in the parotid gland, accounting for 10% of benign neoplasms here. In contrast, laryngeal adenolymphomas are described rarely.² Many of the extraparotid adenolymphomas diagnosed are disproved as they do not fit the histological criteria described above.³

Case History

A 60-year-old woman presented with symptoms of dysphonia, dyspnoea, fatigue and carpopedal spasm. She had been discharged from the ear, nose and throat clinic six months previously, following treatment of Riedel's thyroiditis. However, her goitre had recurred since discharge and subsequent blood tests had revealed hypocalcaemia. She had no parotid masses on examination but flexible laryngoscopy revealed a right-sided cystic swelling of the supraglottis.

Investigation and treatment

Computed tomography (CT) of the larynx was performed to delineate the cyst with a view to excision, revealing significant airway stenosis, partly due to enlargement of the thyroid gland but more so by the supraglottic neoplasm. The lesion was centred on the supraglottic paralaryngeal fat. It extended out through the thyrohyoid membrane as well as extending medially to bulge into and significantly narrow the supraglottic airway (Fig 1). The imaging suggested that the tissue consisted of thick proteinaceous material in an external laryngocoele.

Excision of the laryngeal mass was performed via an external approach. Macroscopically, the biopsy was of

mucoïd tissue, 25mm in size. No malignancy was noted on histology and the diagnosis of adenolymphoma was made (Figs 2 and 3).

Outcome and follow-up

The patient was seen three months postoperatively in clinic, describing initial symptomatic improvement. However, she had noticed recurrent and worsening dyspnoea and dysphonia in the weeks prior to her outpatient appointment. Repeat flexible laryngoscopy revealed a recurrence of the cyst on the right, estimated to be 7mm in diameter and compromising around 50% of her supraglottic airway. Further CT revealed the lesion was limited to the supraglottic region of the larynx but had no external component.

Transoral laser resection of the lesion was performed under general anaesthesia with no complications. Resection of the tumour margins was not attempted. Histology revealed the tumour was excised completely, measured 7mm × 5mm and confirmed a recurrence of adenolymphoma (Fig 4). A third CT scan, performed three months after the transoral resection, showed radiological evidence of recurrence but in the absence of clinical symptoms. The patient remains under surveillance for clinical recurrence and the need for further surgery.

Discussion

The incidence of adenolymphomas in the larynx is rare. A study by Arens *et al* in 1997 revealed that of 342 laryngeal cysts, 10.5% were supraglottic, presenting mostly with foreign body sensation and voice changes.⁴ Only one was diagnosed as an adenolymphoma and was concurrent with a parotid lesion.⁴ Adenolymphomas more commonly account for 10% of benign parotid neoplasms, with 10% of these being bilateral.¹ There is a high propensity for recurrence in the parotid gland following excision but rates of

Figure 1 Preoperative computed tomography of the larynx

Figure 2 Warthin's tumour histology

recurrence in the larynx are unknown. Like others in the literature, our case presented in a laryngocoele.²⁻⁴ The unusual location and size of this adenolymphoma posed a clinical dilemma, requiring detailed discussion with the multidisciplinary team.

Excision of a laryngeal neoplasm with an adequate margin is essential in minimising the risk of recurrence, without compromising the airway, voice or swallowing. Larger or invasive neoplasms are more difficult to resect endoluminally,

Figure 3 Original specimen, closer magnification

Figure 4 Histology recurrence specimen

and an external approach may be required to ensure adequate access, sufficient margins and clearance.

There is limited information in the literature regarding recurrence rates of Warthin's tumours in the larynx and therefore no consensus regarding optimal management. Nevertheless, for larger lesions with extralaryngeal components, an open approach is recommended over an endoluminal one, which is more appropriate for small lesions restricted to the larynx.

Conclusions

Unlike other cases in the literature, this is the first known case of a recurrent laryngeal adenolymphoma following an

external approach. Limited data on management suggest that conservative treatment is often less favourable and the cyst should be resected fully to avoid local recurrence.⁵ This case highlights the importance of ensuring a fully excised specimen, and for larger lesions in particular, the need to consider a longer follow-up period to assess for recurrence and therefore the need for further surgery.

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