Clinical reports

Tumours of the accessory lobe of the parotid gland

S.E. Afify and J.D. Maynard

Gordon Museum, Medical School, Guy's Hospital, London SE1, UK

Summary: Three cases of tumour of the accessory lobe of the parotid gland are reported and the surgical aspects discussed. An approach through a routine parotidectomy incision is preferred to direct incision over the mass.

Introduction

Tumours of the accessory lobe of the parotid gland are rare, and have often been approached by direct incision over the mass. Such limited surgical approach may result in facial nerve damage, as the fine anterior branches run close to the duct, or external salivary fistula. More important is the risk of local recurrence following limited excision.

Three cases of tumour of the accessory lobe of the parotid gland are reported; an approach through a routine parotidectomy incision is preferred.

Case 1

A 50 year old male presented with an 8 month history of a painless lump on the right side of his face. On examination there was a 2 cm firm, well-defined and spheroidal lump on the right side of the face in the region of the accessory lobe of the right parotid gland. Both the facial nerve and the right parotid duct were normal. Through a standard parotidectomy incision, the usual cheek flap was raised. The facial nerve was identified, in the usual way at the posterior part of the gland, and dissected forward removing part of the superficial lobe of the parotid and the whole of the accessory lobe containing the 2 cm tumour. The tumour was embraced by two fine central branches of the facial nerve which were dissected extracapsularly and preserved. The operation field was washed with sterile water as the fine branches of the facial nerve were so close to the capsule. Histological examination confirmed the diagnosis of pleomorphic adenoma which had been completely excised. The facial nerve was intact post-operatively, and there was no external salivary fistula. The patient remained asymptomatic with no signs of recurrence of the tumour 5 years after surgery.

Case 2

A 65 year old female presented with a painless lump on the right side of her face in the region of the accessory lobe on the right parotid gland. The patient had not recovered from a complete Bell's palsy of the right side 10 years prior to the appearance of the lump on her face. On examination there was a 1.5 cm firm, well-defined lump in the region of the accessory lobe of the right parotid gland, and there was also evidence of total right facial palsy. The right parotid duct was normal.

In view of the associated right Bell's palsy, the tumour was approached through a mid-cheek incision. The tumour was widely excised including part of the main duct which was ligated. Main duct ligation does not result in obstructive parotitis and has been used in the past for gunshot wound fistulas of the parotid and for non-calculus recurrent obstructions of the parotid.

Histological examination confirmed the diagnosis of pleomorphic adenoma of the accessory lobe of the parotid gland completely excised. The patient remained asymptomatic with no signs of recurrence of the disease, or salivary fistula 12 years after surgery.

Case 3

A 57 year old female presented with a 3 cm tumour in the accessory lobe of the right parotid gland of one year's standing. She had undergone bilateral parotidectomy 13 years previously for painful recurrent obstructions of the glands.
The tumour was approached through the old parotidectomy scar. The facial nerve was identified and dissected forward to find anterior branches of the nerve closely related to the tumour, which was also adherent to the buccal mucosa. The tumour was found to be a low-grade B-cell lymphoma which was subsequently treated with radiotherapy. There was temporary weakness of the central division of the facial nerve which fully recovered. Two years later she was symptomless with no recurrence.

Discussion

There is little written about the accessory lobe of the parotid gland. Frommer found an accessory lobe of the parotid gland in 20 out of 96 normal adult cadavers. The accessory lobe of the parotid gland is composed of salivary gland tissue arising anteriorly to the main parotid gland and emptying in to Stenson's duct by way of a single or multiple secondary ducts.

Tumours of the accessory lobe of the parotid gland are extremely rare, the behaviour of these tumours being comparable to that of tumours arising from the main parotid gland. Also the spectrum of neoplasia is similar to those arising from the main gland. Johnson & Spiro reported a 1% incidence of parotid neoplasms arising from the accessory lobe of the parotid gland, more than a quarter of which were primary malignant tumours. Perzik & White reported a 7.7% incidence of parotid neoplasms arising from the accessory lobe of the parotid gland, more than a quarter of which were primary malignant tumours.

The diagnosis of tumours of the accessory lobe of the parotid gland is dependent upon an awareness of its possible occurrence. Clinically these tumours occur along the course of the main parotid duct as indicated by the central one-third of a line from the middle of the tragus to a point between the ala of the nose and vermillion border of the upper lip.

There are two surgical approaches in dealing with tumours of the accessory lobe of the parotid gland: cheek incision and standard parotidectomy incision. In cheek incision the tumours are approached through a limited incision over the tumour in the middle of the cheek. This approach is associated with a higher incidence of facial nerve branches damage, because of the superficial location of the buccal and zygomatic branches of the facial nerve. Johnson & Spiro reported a 40% incidence of facial nerve damage for those tumours approached via a cheek incision directly over the tumours. The cheek incision may result in an inadequate excision of the tumours which will result in a local recurrence.

Following a standard parotidectomy incision the facial nerve is identified posteriorly and dissected forward to allow identification of the fine terminal branches in the region of the tumour. Johnson & Spiro reported only a 7% incidence of temporary facial palsy, all of which recovered.

It is suggested that tumours of the accessory lobe of the parotid are best approached through a routine parotidectomy incision with posterior identification of the facial nerve.

References