The Journal of Laryngology and Otology
July 1979. Vol. **93.** pp. 741–744.

A rare 'parotid tumour'

By ANTHONY THOMAS ETHELL (Sydney, Australia)
M.B., B.S. (Sydney), F.R.C.S., F.R.C.S.Ed., F.R.A.C.S.

Introduction

ALTHOUGH cysts of the minor salivary glands are relatively common, those in the major salivary glands are rare. When affecting the parotid they may appear to be cystic but they may also masquerade as solid tumours. Whereas Brennan *et al.* (1970) reported four parotid cysts correctly diagnosed pre-operatively, Shaheen *et al.* (1975) and Hooper *et al.* (1975) each described two which were originally considered solid.

Table I lists lesions of a cystic nature which may occur in the parotid region. Some of these will be clinically cystic and separate from the gland, but others will not be correctly diagnosed until they are explored and excised. Retention cysts are the most common cystic lesions found in the parotid gland followed by those of branchial cleft origin (Ross, 1955; Katz, 1975).

TABLE I

CYSTS IN THE PAROTID REGION

Retention cysts
Branchial cysts
Sebaceous cysts
Inclusion cysts
Dentigerous cysts
Vascular tumours
Lymphangiomata
Hydatid cysts
Cholesteatoma
Ganglion of the
temporo-mandibular joint

This paper presents the first reported case of a ganglion of the temporo-mandibular joint presenting clinically as a 'parotid tumour' and being found at operation to be within the substance of the parotid gland.

Clinical record

The patient was a 28-year-old woman with a twelve-month history of a painless swelling, increasing slowly in size, in front of the right ear. She was otherwise well and suffered only from an occasional ache in the right side of her face. There had been no recent dental treatment.

Examination revealed a firm, diffuse and relatively fixed swelling 2·5 cms in diameter, anterior to the external auditory meatus and lying on the ramus of the mandible, apparently within the parotid gland. The facial nerve was intact, intra-oral examination was normal and there was no cervical lymphadenopathy.

A diagnosis of parotid tumour was made and the patient admitted for exploration.

https://doi.org/10.1017/S0022215100087648 Published online by Cambridge University Press

Operation

Under general anaesthesia the superficial lobe of the parotid gland was mobilised, with preservation of the facial nerve, whereupon the lesion was found to lie deeply. It was mobilised between the temporal and buccal branches of the facial nerve and found to be a thin-walled, multi-loculated cyst, 1·5 cms in diameter, attached to the capsule of the temporo-mandibular joint and lying on and behind the masseter muscle. It was completely excised, and thereafter the mobilised superficial lobe of the gland, which was found to have retained an adequate blood supply, was replaced. The incision was closed with suction-drainage.

The patient progressed well and went home on the fifth post-operative day. Four months later the operative site was well healed without the usual concavity associated with superficial parotidectomy.

Pathology

The lesion contained a glairy fluid and had the histological characteristics of a ganglion, its wall being composed of relatively acellular fibrous tissue lined by a single layer of flattened cells (Fig. 1).

Discussion

Cysts of the parotid gland are uncommon. Their prevalence is differently reported: 2 in 166 patients (1·8 per cent) with parotid lumps (Robinson and Masters, 1964), 35 cysts (4·6 per cent) in 760 parotid tumours (Beahrs *et al.*, 1960), and 6 per cent by Ross (1955). Brennan *et al.* (1970), however, reported 4 cases treated over five years from a population of 120,000 and questioned their rarity.

Shaheen *et al.* (1975) described a cystic lesion of the parotid gland which presented clinically and appeared at operation to be similar to the present case. Histologically, however, although the wall was composed of fibrous tissue, the lining was of epithelium of salivary gland origin.

The histology of this specimen is identical with that of a ganglion in 'Pathology of the Connective Tissue Diseases' (Gardner, 1965). The only other description of a ganglion of the temporo-mandibular joint in the literature appears to be that of Heydt (1977). However, the lesion was found to be separate from the parotid gland at operation.

Summary

A ganglion of the temporo-mandibular joint presenting as a tumour of the deep lobe of the parotid gland is described. This appears to be the first description of such a case in the literature. Simple excision of the lesion after mobilization of the superficial lobe was performed. This form of management gives a very good cosmetic result for the occasional simple cyst of the deep parotid lobe.

The ganglion reported in this paper presented as a parotid tumour. It was managed by mobilization of the superficial part of the gland from the facial nerve until the nature of the lesion was determined. The fact that the superficial lobe of the gland was not excised has caused no ill effect to the patient but has given a better cosmetic result by preventing the usual pre-tragal depression. Con-

https://doi.org/10.1017/S0022215100087648 Published online by Cambridge University Press

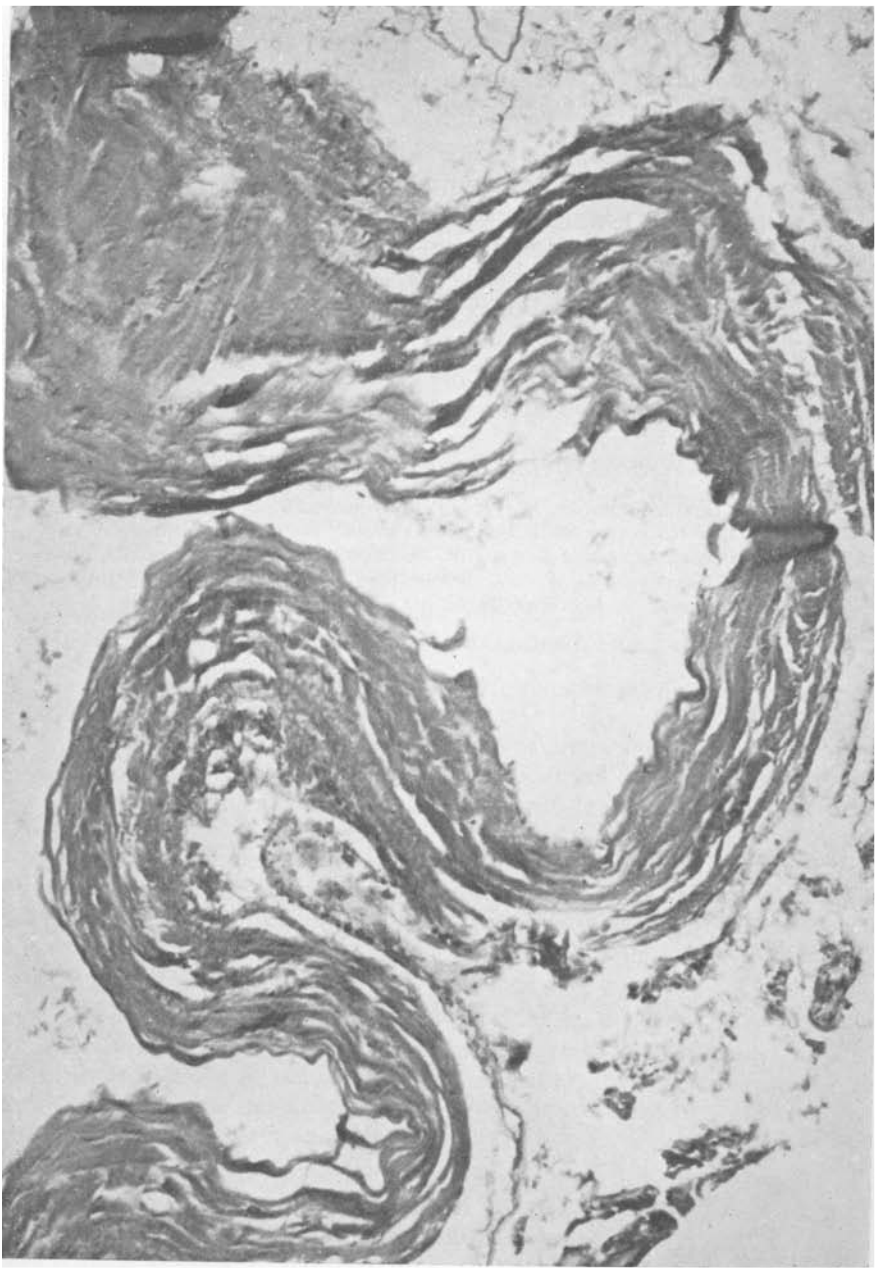


FIG. 1

Medium-power photomicrograph of the ganglion, showing the relatively acellular fibrous tissue wall and single layer of the flattened epithelial cells.

https://doi.org/10.1017/S0022215100087648 Published online by Cambridge University Press

servative surgery has previously been suggested in similar cases (Brennan *et al.*, 1970).

Acknowledgements

I am grateful to Mr. W. H. F. Thomson, Consultant Surgeon, and Dr. B. W. Codling, Consultant Pathologist, of the Gloucestershire Royal Hospital, Gloucester, for their advice.

REFERENCES

BEAHRS, O. H., WOOLNER, L. B., CARNETH, S. W., and DEVINE, K. D. (1960). *Surgical Management of Parotid Lesions: Review of 760 cases. Archives of Surgery*, **80**, 890.

BRENNAN, M. F., GWYNNE, J. F., and MACBETH, W. A. A. G. (1970) *Simple Parotid Cysts. Australian and New Zealand Journal of Surgery*, **40**, 15.

GARDNER, D. L. (1965) *Pathology of the Connective Tissue Diseases*, p. 406. Edward Arnold, London.

HEYDT, S. (1977) *A Ganglion Associated with the Temporo-Mandibular Joint. Journal of Oral Surgery*, **35**, 400.

HOOPER, R., SAXON, R., and TROPP, A. (1975) *Cysts of the Parotid Gland. Journal of Laryngology and Otology*, **89**, 427.

KATZ, A. D. (1975) *Unusual Lesions of the Parotid Gland. Journal of Surgical Oncology*, **7**, 219–35.

ROBINSON, D. W., and MASTERS, F. W. (1964) *Reconstructive Plastic Surgery*. Vol. 3, Chap. 27, p. 1056, ed. J. M. Converse. W. B. Saunders, Philadelphia.

ROSS, D. E. (1955) *Salivary Gland Tumours*. P. 29. Ed. C. C. Thomas, Springfield, Illinois.

SHAHEEN, N. A., HARBOYAN, G. T., and NASSIF, R. I. (1975) Cysts of the Parotid Gland. *Journal of Laryngology and Otology*, **89**, 435.

https://doi.org/10.1017/S0022215100087648 Published online by Cambridge University Press