PAROTID CYSTS

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PAROTID cysts are rare and it therefore seems justifiable to report such a case, which was demonstrated histologically to be a lympho-epithelioma. A description of this parotid lesion, which bears no relation to the lympho-epithelioma of the nasopharynx, has not previously appeared in the British literature.

Case No. 1.

T. McL., age 44, presented with a 6 weeks' history of swelling of the right parotid region. The swelling was painless and did not fluctuate in size (Fig.1). Examination demonstrated a circumscribed cyst 3 cm. across, occupying the tail of the right parotid. Examination of the ears, nose and throat was normal

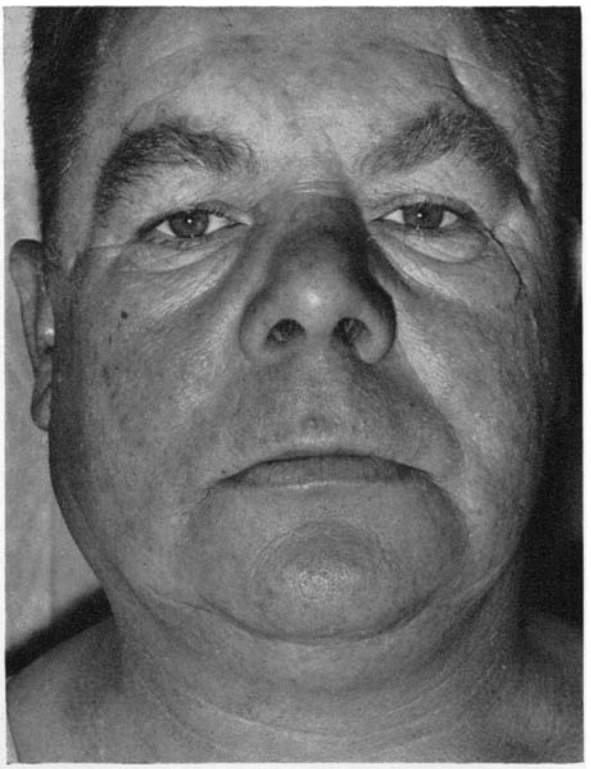


FIG. 1.
To show right parotid swelling.

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and no glands were to be felt in the neck. A lymph node which was subsequently shown histologically to be involved was not palpable pre-operatively.

X ray chest and sinuses, haemoglobin, white cell count and biopsy of the nasopharynx were normal.

A Sialogram (Fig. 2) demonstrated that this was an intraparotid lesion.

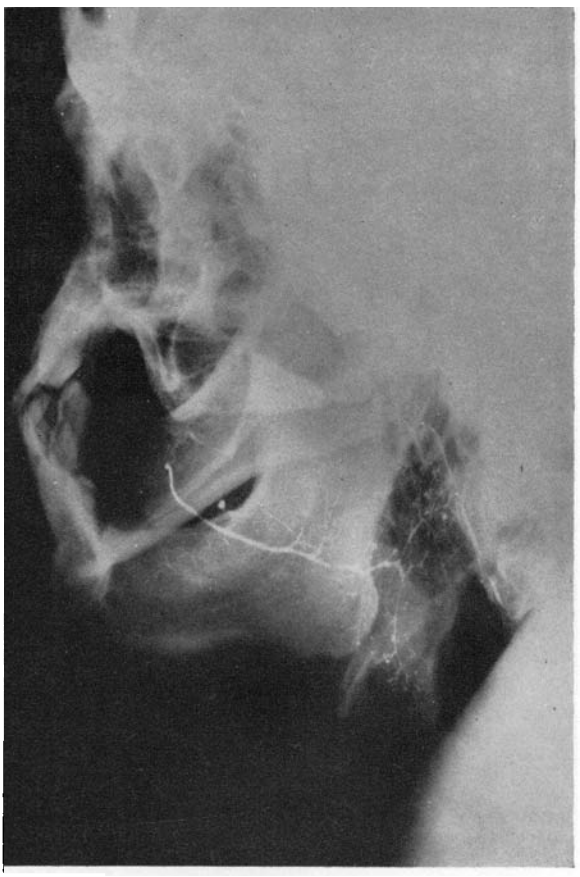


FIG. 2.
Sialogram showing intraparotid lesion.

A superficial parotidectomy was carried out on 28 March 1966 preserving the branches of the facial nerve. Facial function was normal post-operatively.

Histological examination of the excised specimen (Fig. 3) shows normal salivary acini with a cyst lined by squamous epithelium and surrounded by lymphoid follicles. Occasional islands of epithelial cells were also seen in lymphoid tissue remote from the cyst.

A separate lymph node also contained islands of epithelial tissue.

These histological appearances are typical of a lympho-epithelioma, or benign lympho-epithelial lesion, of the parotid.

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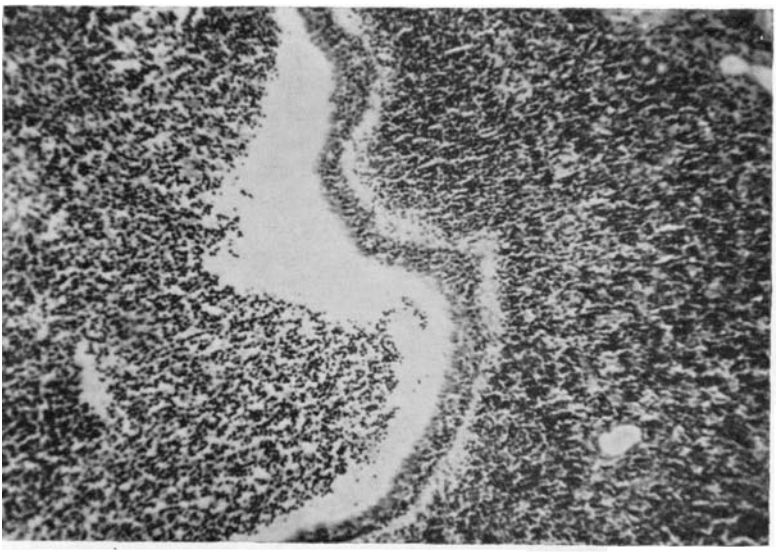


FIG. 3.
Microscopic appearance of lesion.

Perusal of the literature shows that very few true cysts of the parotid have been recorded. The small number which have been recorded fall into the following categories.

(*1*) *Congenital Branchiogenic Cysts*

Some eighteen branchiogenic cysts involving the parotid gland have been recorded (Cunningham, 1929; Karlan, *et al.*, 1962; Kraissl and Stout, 1933; Mihalyka, 1962; Moore, 1940). There has been considerable discussion as to the origin of these cysts which contain lymphoid tissue and squamous epithelium, structures not normally found in the adult parotid. The most generally accepted theory is that these tumours arise from the first branchial cleft and that the lymphoid tissue is derived from the pharyngeal epithelium. It will be recalled that the parotid develops from outgrowths of the epithelium of the alveolo-labial sulcus, the outgrowth, growing backwards on the surface of the first pharyngeal arch.

An alternative explanation was put forward by Kraissl and Stout (1933), to explain the appearance of lymphoid tissue and squamous epithelium in these cysts. They maintain that these cysts are derived from the orbital inclusion body, a vestigial structure in man, but one which in the cat, dog and other carnivora gives rise to salivary glands, embedded in infra-orbital fat.

(*2*) *Parasitic Cysts*

Cysts of the parotid due to infestation by parasites have been recorded. These include echinococcus cyst (Altman and Gutman, 1966) and hydatid cyst (Roviralta, 1959).

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(3) *Neoplastic Cysts*

The lympho-epithelial lesion was first described by Godwin in 1952. At that time he was able to collect eleven parotid lesions which were characterized by masses of lymphoid tissue containing scattered foci of epithelial cells, several of these lesions being cystic or polycystic. The histological appearances were different from that of adenolymphoma.

Two theories have been put forward to explain the origin of these tumours—inflammatory and neoplastic. Most of the evidence points to these lesions being true tumours. In two of Godwin's cases the lesions recurred following excision, one of these recurrences being treated by radiotherapy with regression of the mass.

In the present case a similar histological appearance was found in an adjacent lymph node, which may indicate either a tumour of multicentric origin or metastasis.

Finally, a malignant lympho-epithelioma of the parotid has been reported recently (Hilderman, *et al.*, 1962) in which the islands of squamous epithelium were histologically malignant in character. The patient died $4\frac{1}{2}$ years later from local invasion of the skull.

Despite the apparently neoplastic nature of the tumour no patient has yet died of it with the exception of the latter case.

It is not necessary during removal of these tumours to sacrifice the facial nerve.

Summary

A case of lympho-epithelioma of the parotid is recorded and a suggested classification of parotid cysts is given dividing them into congenital, parasitic and neoplastic.

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