British Journal of Plastic Surgery (1993), 46, 624–625

BRITISH JOURNAL OF PLASTIC SURGERY

Case report

Xanthogranulomatous Sialadenitis, a benign mimic of malignancy

M. Q. Choyce, C. J. H. Padfield and N. S. Mercer

Departments of Plastic and Reconstructive Surgery and Pathology, Frenchay Hospital, Bristol, UK

A 60-year-old woman was referred to the Plastic Surgery outpatients with a 2-week history of a lump in the right side of her neck. This was uncomfortable, but there were no other specific symptoms at presentation. She was taking carbimazole for thyrotoxicosis and digoxin for atrial fibrillation. In 1967, she had undergone surgery to remove a pleomorphic adenoma from an accessory lobe of her right parotid gland. She did not have sialography or any further treatment for this condition.

Physical examination confirmed a hard mass in the right side of the neck below and behind the angle of the mandible, fixed to the sternocleidomastoid. There was no lymphadenopathy. The clinical diagnosis was of a neoplasm arising in the lower pole of the parotid gland.

Fine needle aspiration showed necrotic tissue with inflammatory cells, but no evidence of malignancy.

Magnetic Resonance Imaging showed fatty change in the upper pole of the parotid. An ill-defined, lobulated mass involved the inferior part of the superficial and deep lobes, with characteristics typical of an infiltrating malignancy (Fig. 1A, B). Ultrasound with Doppler examination confirmed these appearances, demonstrating vascular changes consistent with a neoplastic circulation.

At surgery, the mass seemed to invade the sternocleidomastoid. The patient, therefore, underwent a total parotidectomy, sparing the facial nerve, and a radical neck dissection. She has since made an uneventful recovery with no facial palsy.

The resected specimen is unique. On sectioning, the mass was centrally yellow and friable; grey and more fibrous peripherally. It had spread into the adjacent muscle and two discrete jugular lymph nodes had further separate deposits.

Histology showed a highly cellular granulomatous inflammatory process with numerous foamy and fat-

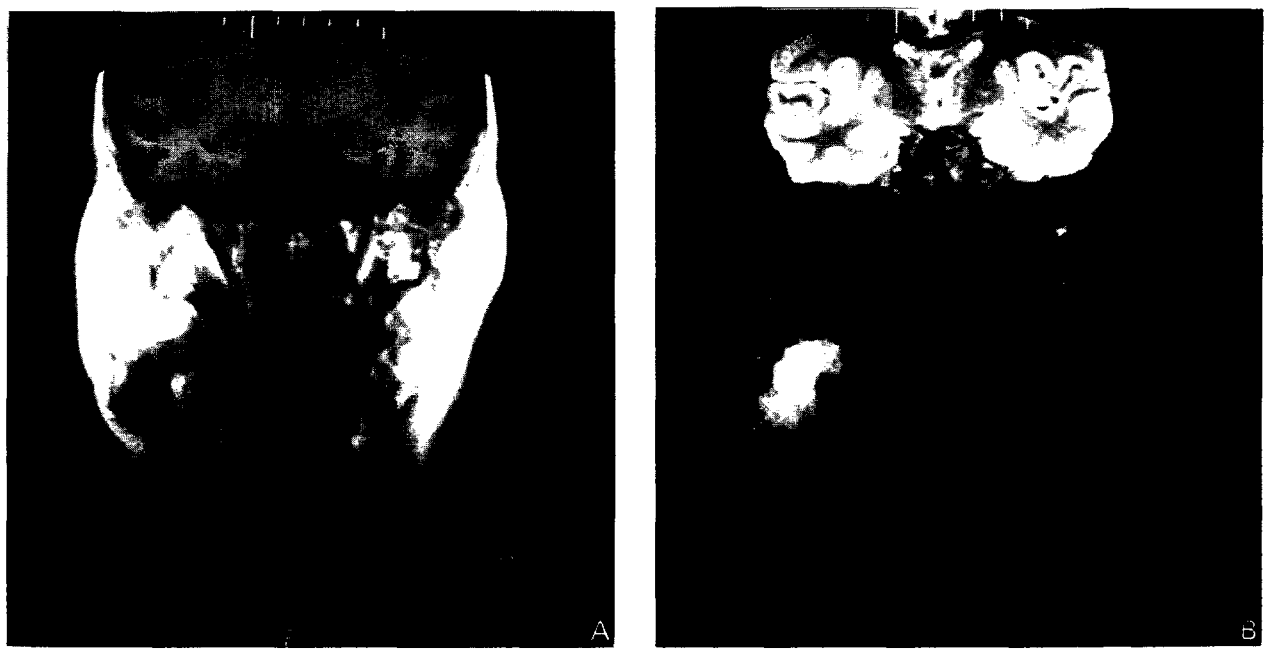

Fig. 1

Figure 1—(A) T1 weighted and (B) STIR coronal magnetic resonance images showing infiltrative lower pole mass (short arrow), fatty change in upper pole (long arrow), and normal left parotid (double arrow).

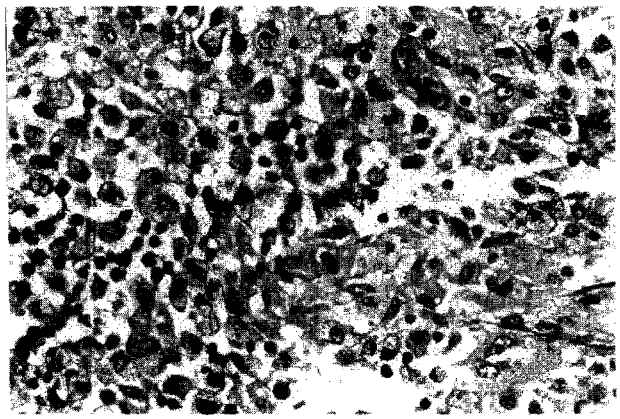

Fig. 2

Figure 2—Xanthomatous cells in mixed inflammatory infiltrate with some spindled cells. H and E, × 400.

laden macrophages. The process contained a number of spindle-shaped cells and giant cells (Fig. 2). This condition has never been described in a salivary gland, but in the kidney xanthogranulomatous pyelonephritis is a rare but well-documented process that appears identical.[1] It is an atypical form of severe chronic renal parenchymal infection, the cause of which remains obscure, characterised by the presence of yellowish nodules and pericalcyceal streaks of granulation tissue, the essential feature of which is lipid-laden macrophages.[2] In a series of 26 patients with xanthogranulomatous pyelonephritis,[3] only one was correctly diagnosed prior to surgery (which all 26 underwent). In 11 patients, malignancy was strongly suspected; it may also mimic renal tuberculosis and other inflammatory conditions. In the kidney, the condition may be focal or general, and it is capable of involving the fascia and surrounding tissues. Xanthogranulomatous pyelonephritis does not seem to recur after complete excision and the prognosis is excellent unless bacteriuria continues or hypertension develops.

By analogy, we believe our patient to have had correct treatment for the completely unsuspected—and hitherto unrecognised—condition of xanthogranulomatous sialadenitis and we remain cautiously optimistic about her prognosis.

References

1. Gingell JC, Roylance J, Davies ER, et al. Xanthogranulomatous pyelonephritis. Br J Radiol 1973; 46: 99–109.
2. Moller JC, Kristensen IB. Xanthogranulomatous pyelonephritis. Acta Path Microbiol Scand 1980; 88A: 89–96.
3. Malek RS, Elder JS. Xanthogranulomatous pyelonephritis. J Urol 1978; 119: 589–93.

The Authors

M. Q. Choyce, FRCS, Senior House Officer in Plastic Surgery
C. J. H. Padfield, FRCS, MRCPath, Senior Registrar in Pathology
N. S. Mercer, FRCS, Consultant Plastic Surgeon

Requests for reprints to Mr N. S. Mercer, Department of Plastic and Reconstructive Surgery, Frenchay Hospital, Frenchay, Bristol BS16 1LE.

Paper received 15 February 1993.
Accepted 20 May 1993, after revision.