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Liposarcoma in the pharynx

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Abstract
A rare case of an atypical lipoma in the pyriform sinus is described with an unusual presentation and some difficult histological features. Excision was performed endoscopically, there has been no evidence of recurrence for over a year. External surgical excision is reserved in case of recurrence of the tumour.

Case report

A 62-year-old man was admitted as an emergency to our hospital in January, 1988 with a history of choking on coughing. On coughing he produced a fleshy, pedunculated mass protruding into his oral cavity. He had experienced some difficulty in swallowing recently and changes in his voice. The initial symptoms started six months before. There was no history of loss of weight and he had always enjoyed good health in the past.

On examination, no lesion was seen in the nasal cavity or post-nasal space, but indirect laryngoscopy showed a mass in the left pyriform fossa. There were no palpable neck glands. A chest X-ray showed some bronchiectatic changes. Laryngeal tomography showed a mass in the left pyriform sinus. A soft tissue neck X-ray showed widening in the post-cricoid area. Under a general anaesthetic, direct laryno-pharyngoscopy showed normal vocal cords. A mass was seen occupying the left pyriform sinus and extending to the post-cricoid area and through the crico-pharyngeal sphincter to the oesophagus. At this stage it was dificult to determine how far it was extending into the oesophagus. It was unsafe to perform oesophagoscopy or to perform excision without determining the extent of the lesion and further investigation was needed prior to any further treatment. Subsequently, the patient underwent a barium study and CT scan. The barium study showed a polyp extending to the level of T3 (Fig. 1). The CT scan of the upper chest and lower neck showed a soft tissue mass extending from the level of the pyriform sinus to the level of T3, the main bulk of which was lying in the upper oesophagus. The scan suggests that the bulk of this mass lay intra-luminally and that there was no extension through the pharyngeal or oesophageal walls (Figs. 2 and 3).

The patient underwent a further general anaesthetic and excision of the polyp from the left pyriform sinus was performed by pharyngoscopy (Fig. 4). The base of the lesion was diathermied.

He made a good post-operative recovery and resumed his eating easily within in a few days. A post-operative barium swallow showed a clear upper oesophagus (Fig. 5).

Histopathology

The gross specimen consisted of a fusiform mass measuring 6.5 cm in length by 2.5 cm in maximum diameter together with four smaller tissue fragments. The tumour had a fleshy, pale grey coloured cut surface in the fixed state.

The lesion was extensively sampled and sections revealed a surface covering of stratified squamous epithelium with a core of fibro-adipose tissue. Occsional cysts were present, some lined by respiratory type epithelium and some by squamous epithelium (Fig. 6). High power microscopy showed a mixture of mature adipocytes, hypercellular fibrous septa and cells with hyperchromatic atypical nuclei. Rare bizarre lipoblasts were present. These features are illustrated in Figure 7.



FIG. 1
Barium swallow showed a huge polyp extending into the lumen of the oesophagus down to D3 level.

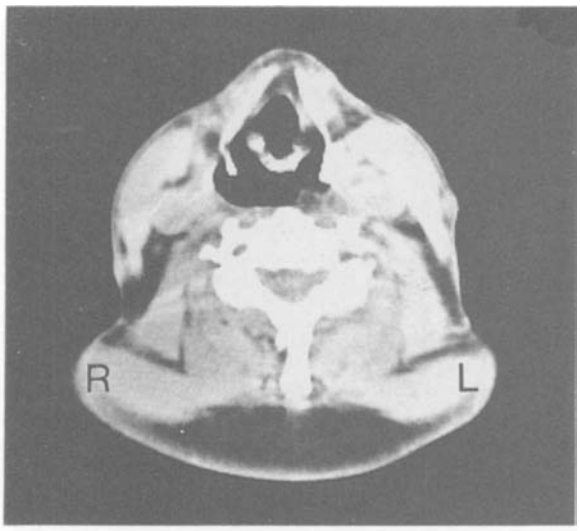
The small tissue fragments from the resection margin of the lesion included areas of tumour suggesting that excision may have been incomplete.

The tumour was characterized as a well differentiated liposarcoma, which some authorities regard as an atypical lipoma. The case was referred to the Soft Tissue Pathology Deparment of the Armed Forces Institute of Pathology in Washington, DC for confirmation because of its rarity.

In view of the pathology report, the patient was reviewed on

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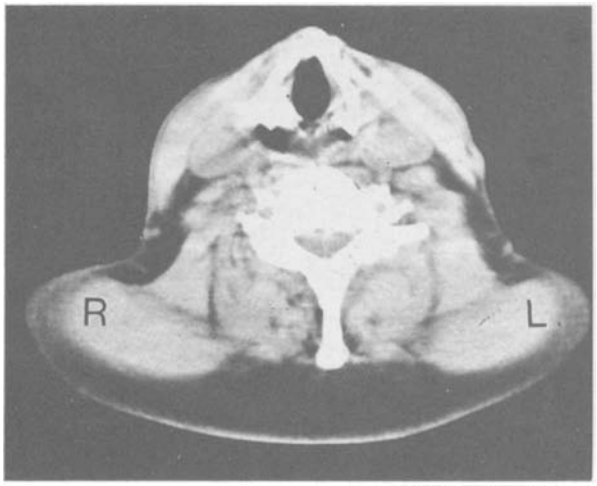


FIG. 2 and 3
CT scan showed soft tissue mass in the left pyriform sinus.

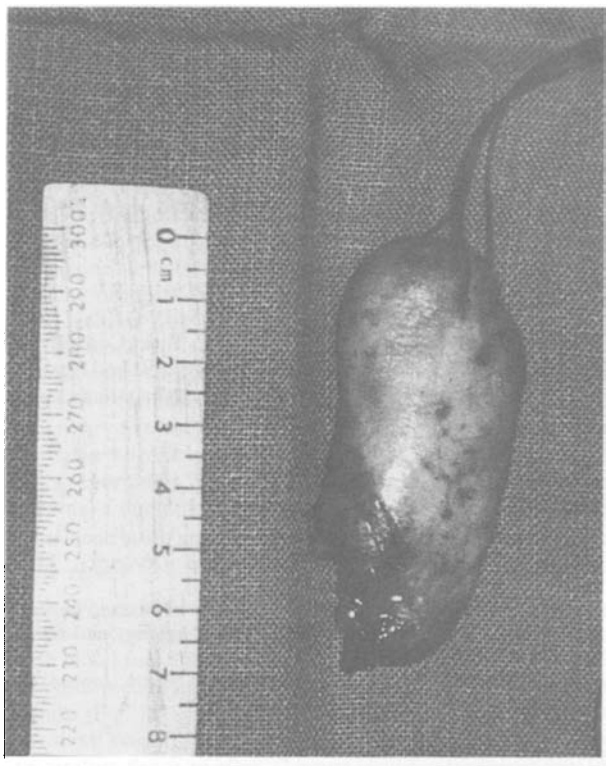


FIG. 4
Lesion excised from the pyriform sinus.

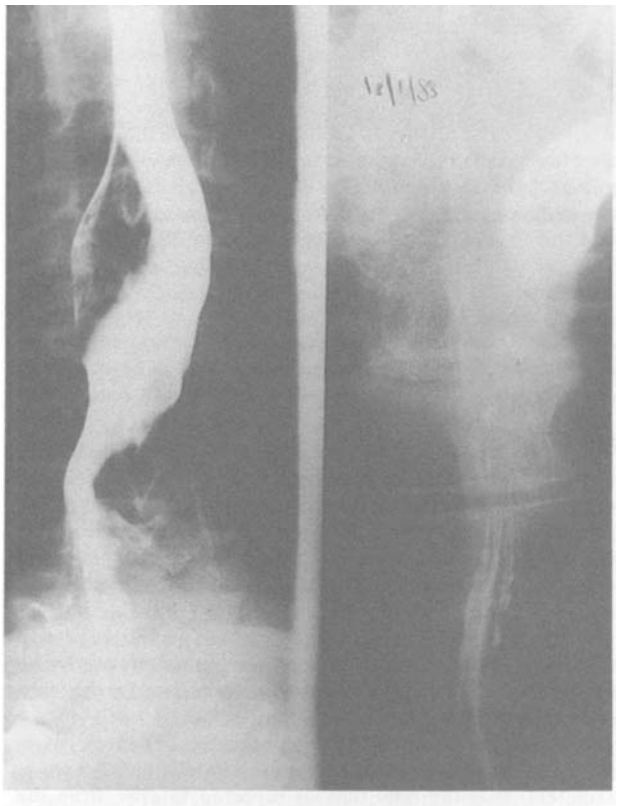


FIG. 5
Post-operative barium swallow showed clear oesophagus.

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FIG. 6

Section showing surface epithelium, fibroadipose tumour core and cyst. (Haematoxylin and eosin ×20).

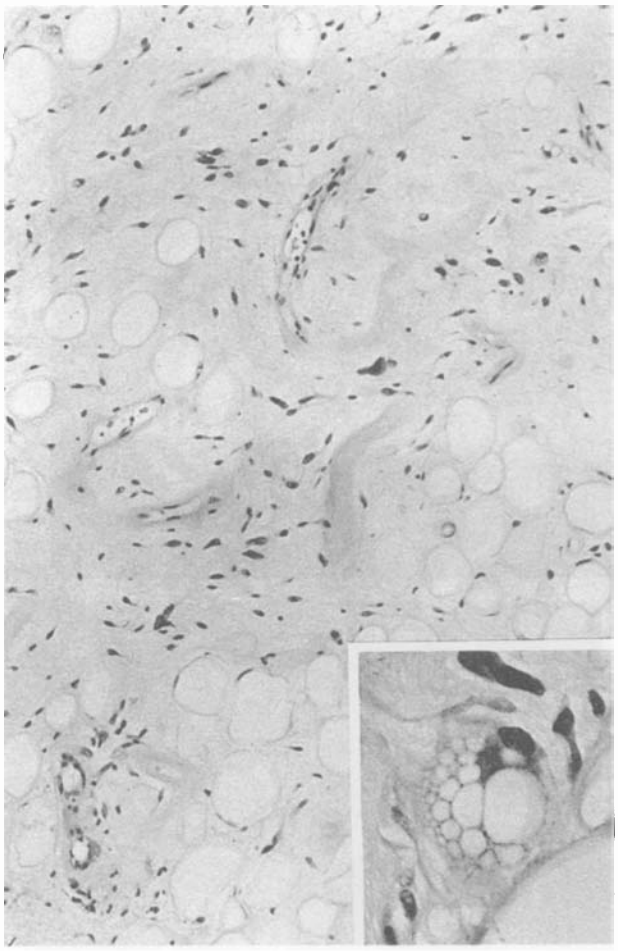


FIG. 7

Typical area of tumour showing hypercellular septa, adipose tissue. Inset: a bizarre lipoblast. (Haematoxylin and eosin ×100; inset ×500).

a six monthly basis and has undergone further endoscopy twice since the operation. The last endoscopy was in March, 1989 which showed only scar tissue and no evidence of recurrence.

Discussion

Lipoma is a rare tumour in the larynx and pharynx, (Zakrzewski, 1965); as they are slow growing tumours the symptoms are usually minimal for a long time. The symptoms usually being dysphagia, a feeling a lump in the throat, changes to the voice or respiratory tract infections, as demonstrated in our case.

Malignant changes in a lipoma in the head and neck are very rare, (Batsakis and Fox, 1970). Sarcomatous change was found in a lipomatous lesion which was surgically excised for the tenth time from the pharynx (Kapur, 1968).

Our case is the largest tumour reported (about 8 cm in length, including the tissue excised separately, and 2.5 cm in diameter). It is the only tumour reported to arise from the pyriform sinus. The nature of the pathology, made the management open for debate, as the tumour showed no recurrence for over a year. The plan is to review the patient every four months, and if there is any evidence of recurrence, external surgical removal will be carried out.

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