LEIOMYOMA OF THE OESOPHAGUS

J. B. HOWELLS, M.B., B.CHIR., D.M.R.D.

The Whittington Hospital, London, N.19

ALTHOUGH it is the commonest of the benign tumours of the oesophagus, leiomyoma is, nevertheless, comparatively rare. The first recorded case was that of Munro in 1797, but although this tumour was shown to arise from muscle, histological proof was not provided. From that time until 1956, only 110 surgically treated cases were reported, together with 126 discovered post-mortem. Since 1956, a larger number are to be found in the world literature but reports in the English language are still not numerous.

Case History

The present case is that of a woman, aged 41, whose chest was examined radiographically before employment by a different industrial organization. She was entirely symptomless. The postero-anterior film (Fig. 1) shows a rounded opacity with smooth lateral margin extending to the right of the upper mediastinum at the level of the posterior ends of the 7th and 8th ribs. Further investigations were carried out at the Whittington Hospital. In the lateral film (Fig. 2) the opacity is seen to lie between the posterior border of the trachea and the front of the spine. Barium swallow examination (Fig. 3) shows the characteristic segmental filling defect which appears to be due to extrinsic pressure. There is a typical 'ring' sign below the defect and the mucous membrane appears to be intact. The patient was transferred to the London Chest Hospital under the care of Mr. Vernon Thompson. Bronchoscopy revealed some deformity of the trachea from extrinsic pressure, and oesophagoscopy confirmed the radiological findings.

At thoracotomy, a well-encapsulated tumour, 5 cm. x 3.5 cm. x 2.5 cm., was enucleated from the wall of the oesophagus, and proved histologically to be a leiomyoma. Post-operative recovery was uneventful.

Discussion

Chi and Adams (1950) report that, in an eleven-year period at Chicago University Clinic, only two cases of leiomyoma were found in life compared with 246 cases of oesophageal carcinoma. One of these two was discovered at routine radiography. Johnson, Clagett and McDonald (1953), at the Mayo Clinic, found 18 leiomyomas and leiomyosarcomas from 1920 to 1949 and, during the same period, 2312 cases of carcinoma of the oesophagus. This is an incidence of less than 1%. Any part of the oesophagus may be the site of origin of the tumour. Piacentini (1955) quotes the following distribution: Upper third 14, middle third 23, lower third 37.

The age incidence appears to reach its peak in the fifth decade. Symptoms associated with

FIG. 1

leiomyoma are dysphagia, nausea and vomiting, dyspnoeic crises due to compression of the trachea and bronchi, and very rarely, pain. Storey and Adams (1956) review in detail 82 patients of whom only 11 (13.4%) were free of symptoms and discovered on routine radiography.

Radiological appearances depend on the anatomical form. A pedunculated form, which is rare, gives rise to a filling defect which is continuous with a wall which is functionally intact. The commoner intramural type shows as a rounded shadow with clean edges well demarcated from surrounding tissues. On barium swallow examination there is usually displacement of the affected part of the oesophagus, a concavity produced by extrinsic pressure, and a regular rounded soft-tissue shadow. The mucosal folds overlying the mass may be stretched out, or flattened, and there is no evidence of obstruction with normal peristaltic

FIG. 2

movement. A 'ring' sign at the lower pole of the tumour indicates a slight kinking of the œsophagus where the deviation due to the tumour ceases.

Fairly accurate radiological diagnosis is possible, but, in Chi and Adams' series of 63 cases in which

FIG. 3

a pre-operative diagnosis was recorded, 7 (11.1%) had been misdiagnosed as carcinoma.

I wish to thank Dr. A. L. Jacobs and Mr. Vernon Thompson under whose clinical care the case was investigated and treated for their permission to publish the case. I am grateful also to Dr. G. Osborne for his help and advice.

REFERENCES

- CHI, P. S. H., and ADAMS, W. E. (1950): Benign Tumours of the Œsophagus, *A.M.A. Arch. Surg.*, **60**, 92.
 JOHNSON, J. B., CLAGETT, O. T., and McDONALD, J. R. (1953): Smooth Muscle Tumours of the Œsophagus, *Thorax*, **8**, 251.
 MUNRO, J. (1797): *Disputatis Medica Inauguralis de Dysphagia*. Edinburgh.
 PIACENTINI, L. (1955): Leiomyoma of the Œsophagus, *J. thorac. Surg.*, **29**, 296.
 STOREY, C. F., and ADAMS, W. C. (1956): Leiomyoma of the Œsophagus, *Amer. J. Surg.*, **91**, 3.

OIL GRANULOMA (PARAFFINOMA) OF THE LUNG

M. P. VAIDYA, F.R.C.S.E., F.R.C.S.

Formerly Registrar, Thoracic Surgical Unit, Postgraduate Medical School of London

THE relative insolubility of lipoids in the tissues of the body results in the formation of a granulomatous lesion when these are lodged in the tissues. Thus

Present address: First Assistant, Department of Thoracic Surgery, The London Hospital, London, E.1.

a granuloma of the lung is produced when oil is deposited in it, as a result of fibrous tissue reaction to the presence of such lipid material. The lipoids may reach the lung by aspiration or inhalation (exogenous) or by local deposition (endogenous) as occurs in association with bronchial carcinoma