LARGE CYSTIC LEIOMYOMA OF STOMACH

By H. S. TRAFFORD, M.B., F.R.C.S. (Ed.), D.Obst.R.C.O.G.
Senior Surgical Registrar, Birmingham General Hospital, Birmingham

Smooth muscle tumours of the gastro-intestinal tract have been classified as follows (Lumb, 1951):

1. Gastro-intestinal tract leiomyomas

(a) *Submucous*, arising in the wall and extending as a tumour into the lumen of the bowel. This variety is nearly always of a solid type.

(b) *Subserous exo-enteric*, arising in the wall and extending into the peritoneal space. These tumours are usually large, and show a tendency to cystic degeneration.

(c) *Hour glass*. A combination of (a) and (b).

2. Retroperitoneal leiomyomas

These are tumours arising from smooth muscle and which show a tendency to large size and cystic degeneration. Type 1(a) is the most common of these tumours. It may or may not be associated with mucosal ulceration. Types 1(b), 1(c) and 2 are all rare.

The case described is an example of a leiomyoma of type 1(b).

From the published cases this condition appears more common in the male and most frequently occurs in the age group 40-60 years, which is also the age group in which malignancy of the stomach is most frequent.

Case Report

Mrs. A., age 69, was admitted to hospital in March 1951, with a right strangulated femoral hernia. She had recently lost weight, and complained of painless swelling of the abdomen for some months. She had no other symptoms.

Examination. This showed a rather anaemic, frail old lady with a strangulated femoral hernia of 12 hours' duration. A large firm mobile mass was found in the abdomen, reaching to the xiphisternum and appearing to arise from the pelvis. This was thought to be ovarian in origin.

Operation. Under general anaesthesia the hernia was reduced and repaired, and the mass also removed through a separate paramedian incision.

FIG. 1

FIG. 2

FIGS. 1. and 2.—Naked eye section of tumour.

FIG. 3.—Low power section.

FIG. 4.—High power section.

It was a tumour attached to the lesser curvature of the stomach by a pedicle, and its removal necessitated a wedge excision of a portion of the stomach; the defect was repaired in two layers. One pint of blood was given during the operation.

The patient was discharged home fit and well on the 13th post-operative day, and has remained well and put on weight since.

Pathology

Macroscopic. A lobulated and bosselated tumour 28 x 9 x 18 cm. and weighing 2,020 g. On cutting it was seen to be a large cyst containing bloodstained fluid (Figs. 1 and 2). The wall was 0.5-0.25 cm. thick, and in places resembled smooth muscle. There was an opaque yellow lining which stripped off easily, and attached to this were yellow 'chicken fat' masses. In many places there were layers of blood and fibrin on the surface. Crest-like projections of the lining into the cavity occurred, as well as several pinkish white fleshy nodules. In one area muscle fibres of the stomach wall could be made out on the surface of the tumour and incorporated in the adjacent cyst wall.

Microscopic. Several sections from the cyst wall and fleshy area showed a leiomyoma, and without doubt the tumour was a vascular cystic

leiomyoma (Figs. 3 and 4). The tissue showed numerous spaces usually lined by a thin layer of collagen and possessing an endothelial lining. A few contained red cells; others had no endothelium but showed a layer of fibrin applied to the wall. The cystic degeneration seemed to arise by the coalescence of cavities of this kind. In a few areas hyperchromatic nuclei were seen, and there were some multinucleate cells. A few normal muscle cells—apparently from the stomach wall—were present in the edge of one section. In view of the nuclear abnormalities described the possibility of malignancy was considered, but it was felt that the history must be a very long one for the tumour to have attained this size and therefore is most likely to be benign.

Summary

The clinical and pathological aspects of a case of cystic leiomyoma have been described. In the seven cases recently described by Lumb (1953) three cystic leiomyomata arose from the stomach and the remainder from the intestine, mainly the jejunum. The macroscopic and histological features of this case are very similar to those already reported.

The degree of malignancy in these cases is often difficult to assess. Their tendency to degeneration

gives rise to bizarre cells and an occasional mitotic figure is often seen, but such tumours may only be locally malignant. In Lumb's series, seven of the cases were histologically dedifferentiated but peritoneal metastases only occurred in one instance. It seems that each case must be considered on its own merits.

My thanks are due to Dr. E. M. Stirk, of the Pathology Department of the North Staffordshire Royal Infirmary, for the photographs and path-

ology of the tumour, and to Mr. L. M. Zinck for permission to publish this case.

BIBLIOGRAPHY

- COWDELL, R. H. (1950), *Brit. J. Surg.*, **38**, 149.
 DAWSON, J. (1951), *Brit. J. Radiol.*, **23**, 275.
 GOLDEN, T., and STOU, A. P. (1946), *Surg. Gynae. Obstet.*, **73**, 784.
 LUMB, G. (1951), *J. Path. and Bact.*, **63**, 139.
 MEISSNER, W. A. (1944), *Arch. Path.*, **38**, 207.
 WILLIS, R. A. (1948), 'Path. of Tumours,' London, 733.

Manufacturers' Notes

Pharmaceutical Specialities (May & Baker) Ltd., as distributors for the Distillers Company (Biochemicals) Ltd., announce the availability of streptomycin sulphate suitable for intrathecal use. This new product is offered in boxes of 10 x 10 cc. ampoules, each ampoule containing 100,000 units of streptomycin sulphate in dry form.

NEW THREADWORM REMEDY

A new product, 'Antepar' brand Elixir, is now available in the home market from Burroughs Wellcome & Co. for the treatment of threadworm infestation (oxyuriasis, enterobiasis). Its introduction resulted from studies at the Wellcome Laboratories of Tropical Medicine where it was shown that piperazine hydrate, the active ingredient of 'Antepar,' was far more effective than any of the traditional remedies. Whereas the best of the latter produced, in clinical trials, a cure rate of about 70 per cent., 'Antepar' eliminated the parasites in 97 per cent. of all cases treated at the recommended dosage level. No important side-effects were observed with 'Antepar' and no special regime of cleanliness, fasting or purging had to be followed during treatment. 'Antepar' contains 500 mg. of piperazine hydrate per fluid

drachm in a pleasantly flavoured syrup base and is available in bottles of 4 fl. oz. (6s. 6d. plus 1s. 3d. P.T.) and dispensing packs of 20 fl. oz. (24s. 9d. exempt P.T.), both prices subject to usual discount.

NEW FILM ON NALORPHINE

A new film entitled 'Nalorphine' ('Lethidrone') has been produced by the Wellcome Film Unit in collaboration with the Wellcome Research Laboratories. This describes the action of nalorphine (N-Allylnormorphine) in antagonizing the effects of morphine and other drugs with a similar action. The film is in colour, with sound, and runs for 10 minutes.

The film demonstrates the dramatic recovery which results when intravenous nalorphine is given to dogs narcotized with morphine, methadone ('Physeptone') and thiambutene ('Themalon'), a new analgesic recently introduced into veterinary practice.

The groups of drugs which act in the same way as morphine are listed, for it is only these which are specifically antagonized by nalorphine.

The film may be borrowed on application to the Public Relations Officer, Burroughs Wellcome & Co., 183-193 Euston Road, London, N.W.1.