and the tubing removed. The rod is ¼ in. in diameter and 2½ in. long. This is adequate although narrower and shorter than usual. The bowel is opened transversely. In obstructed cases I have found that decompression at the time of laparotomy has many advantages. Exploration, assessment of the problem, the fashioning of a colostomy, and the closing of the abdomen are much easier when the bowel has been deflated. Having already emptied the bowel I have not been troubled in these obstructed cases by flooding and soiling of the wound with fæces while suturing the bowel to the skin, which is done with 00 plain catgut. A small cuff of rubber tubing is placed at each end of the glass rod to discourage it from slipping out of place. The suturing completed, the skin is cleaned, dried and painted with tinct. benzoin co. or Benzo-Mastiche. A Chiron bag with a 4 in. adhesive square suitably cut out is fitted over the colostomy, the bag being changed daily. Patients have had fewer unformed stools in the post-operative period, which I believe is due to the avoidance of the serositis. The nursing is much easier. The patient rarely undergoes the discomfort and misery of the orthodox loop colostomy. Healing is rapid and without inflammation or fibrosis. The rod may be removed on the fifth day, when the colostomy is soundly healed. The mucosa-skin junction becomes watertight quickly and there has been no infection of the wounds or peritoneum in my 14 cases. Neither has there been any retraction of the colostomies that have been left for long periods.

Finally, an important advantage is the absence of inflammatory reaction so that closure of the colostomy is easy. The mucosal skin junction is divided and the bowel can usually be freed by gauze dissection; it is surprising how bloodless this is. Suturing of the bowel is easier and, not being friable and inflamed, does not require resection.

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REFERENCES

BROOKE, B. N. (1952) *Lancet*, ii, 102.
BUTLER, C. (1952) *Proc. R. Soc. Med.*, **45**, 41.
CRILE, G. (1954) *Ann. Surg.*, **140**, 459.
GABRIEL, W. B. (1948) The Principles and Practice of Rectal Surgery. 4th ed. London.
PATEY, D. H. (1951) *Proc. R. Soc. Med.*, **44**, 423.
RAFAL, H. S. (1949) *Amer. J. Surg.*, **77**, 507
TURNBULL, R. B., Jr. (1958) *Surg. Clin. N. Amer.*, **38**, 1362.
WARREN, R., and MCKITTRICK, L. S. (1951) *Surg. Gynec. Obstet.*, **93**, 555.

Malignant Lymphoid Tumours of the Intestinal Tract [*Summary*]

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THIS paper summarizes some of the features seen in 38 patients with malignant lymphoid tumours of the intestine at the Westminster and St. Mark's Hospitals over the last twenty-five years and at the Gordon Hospital since its re-opening in 1947.

The series comprises 25 men and 13 women, having an average age of 55 years, and an age range from 16 to 83 years. In 29 the growths were single discrete tumours; in 4 there were two or more discrete growths and in 5 there was diffuse lymphoid polyposis involving a variable length of the intestinal tract. This last type, which forms 15% of our cases, is at present not well recognized.

Of the 33 cases with single or multiple discrete tumours, the jejunum was primarily involved in 3, the ileum in 9, the ileocæcal region in 3, the colon in 4 and the rectosigmoid in 14. Histological classification using carefully chosen criteria showed that 18 patients had lymphosarcomas, 15 reticulum cell sarcomas, 4 Hodgkin's disease and 1 a giant follicular lymphoma. There was no tendency for one histological type of tumour to produce multiple deposits or diffuse polypi, or to have a predilection for any one site. During our investigations we encountered a number of rectal lymphomas. These present as submucosal often polypoid swellings in the lower rectum and consist of aggregates of lymphoid tissue in the mucosa and submucosa. They contain follicles, do not invade muscle coats, and are usually separable on histological grounds from malignant lymphosarcomas, though there is a small group in which differentiation may be difficult. 80 such lesions have been described by Morson (1959).

Analysis of the major presenting symptoms and signs of the malignant tumours in our series shows that growths situated in the small intestine present commonly with nausea, vomiting and other signs suggesting intestinal obstruction;

a mass is often palpable. Growths in the colon and rectum most frequently present with bleeding and are often visible on proctoscopy or sigmoidoscopy. Those patients with lymphoid polyposis commonly have visible polypi in the rectum. In 14 of our 35 patients in whom presenting symptoms were adequately recorded, however, there was no complaint other than a feeling of malaise until the sudden onset of obstruction (11 cases) or perforation (3 cases) necessitated surgical intervention. In no case did a blood count at the time of operation show any evidence of lymphatic leukæmia.

At laparotomy 21 growths appeared as annular thickenings of the bowel, 11 as bulky tumours protruding into the lumen, 5 as diffuse polyposis and one as an aneurysmal dilatation of the bowel. The degree of lymph node enlargement seen at operation varied greatly and in our series bore no direct relation to the involvement or otherwise of the nodes by tumour. Many enlarged lymph nodes showed the changes of sinus catarrh only, while normal-sized ones were often involved in the malignant process; the presence of enlarged nodes is not necessarily an indication that the growth is inoperable.

33 cases were treated surgically and of these 17 subsequently had radiotherapy. 3 others had radiotherapy only, and 2 had no treatment. In our series post-operative radiotherapy did not materially alter the prognosis. 16 of the 38 cases are now dead; 11 died as a direct result of the disease, 2 more from immediate post-operative complications and 3 from unrelated causes. 3 more cannot be traced, leaving 19 survivors for follow-up. In the ten-year survival group there are 4 patients, all free of evidence of disease: all of them had lymphosarcomas. In the five- to ten-year group there is one patient who is known to have a recurrence; the remaining 14 patients have been followed up for less than five years. Of these, 5 have evidence of recurrence, while 9 are clinically free. Thus of 35 patients adequately followed up, 17 have either died of their disease or have already evidence of recurrence: it is probable that no more than one-quarter of all cases will survive ten years from the time of diagnosis.

We would like to plead for full recording and follow-up of all these tumours so that presenting symptoms and signs, type of growth, lymph node involvement, prognosis and the effects of treatment may be better assessed. A fuller report of this work will appear in the future.

REFERENCE

MORSON, B. C. (1959) *Postgrad. med. J.*, **35**, 101.

Meeting
March 9, 1960

MEETING AT THE MEDICAL COLLEGE OF ST. BARTHOLOMEW'S HOSPITAL, LONDON

THE following papers were read:

Radiotherapy in the Treatment of Advanced Carcinoma of the Rectum.—Mr. I. G. WILLIAMS.

Mercury Bichloride in the Treatment of Cancer of the Large Intestine.—Mr. W. M. KEYNES.

The Extra- and Intra-mural Blood Supply of the Colon.—Mr. J. D. GRIFFITHS.

Carcinomas of the Ovary Presenting as Ulcerating Tumours of the Rectum—Report of Two Cases and Review of Five Recorded Cases.—Dr. J. S. CORNES and Mr. HENRY R. THOMPSON. To be published in *Brit. J. Surg.*, July 1960, **48.**

Hirschsprung's Disease in the Adult.—Mr. IAN P. TODD.

The following demonstrations were given:

(1) **Rabbit's Ear Chamber to Show Tissue Reaction to Catgut.** (2) **Some Effects of Local X-irradiation on Healing.**—Professor D. SLOME, Dr. G. H. BLAIR and Mr. R. D. CHAMBERS.

Electron Micrographs to illustrate: (*a*) Fat Absorption in the Gut. (*b*) Effects of Radiation on Cells.—Dr. D. LACY and collaborators.

Leukæmia and Tumour Incidence in Control and Irradiated Mice.—Dr. PATRICIA LINDOP and Professor J. ROTBLAT.