



Section of Proctology

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Meeting October 22 1969

Short Papers [*Abridged*]

Anastomotic Failure in Relation to Blood Transfusion and Blood Loss

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Six hundred and fifteen cases of anterior resection and left hemicolectomy were analysed by an Atlas computer in respect of anastomotic breakdown. Leak rate was 16.1%. A relationship was demonstrated between the amount of blood transfused during operation and the leak rate, significant at 0.1% level. This relationship was independent of age, hospital, diagnosis, height of arterial ligation, division of lateral ligaments, height of lesion, &c. Analysis of the length of storage of transfused blood showed no relationship between this and the leak rate. Study of blood flow in the caudal mesenteric artery to the left colon in the dog, using an electromagnetic flowmeter, showed only minor alterations after exchange transfusions with stored autologous blood, A-C-D and potassium salts.

Hæmorrhage of 10% of blood volume produced a dramatic fall in colonic blood flow, which was not always reversed by reinfusion of the shed blood. Section of the lumbar colonic bundle of sympathetic nerves, however, restored flow. It is possible, therefore, that leakage of anastomoses is related to operative blood loss,

rather than to blood transfusion, and that vasoconstriction produced by hæmorrhage has a deleterious effect on the anastomosis. It is suggested that the use of ganglion-blocking agents might theoretically reduce the incidence of anastomotic failure.

Palliative Resection of the Large Bowel in the Presence of Liver Metastases

by Harold Ellis MCh FRCS
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A study of 640 patients with carcinoma of the large bowel submitted to laparotomy at Westminster Hospital from 1957-66 showed that 112 (18%) had liver metastases (Oxley & Ellis 1969). Six had laparotomy only, and all were dead in five months. Nineteen had a palliative colostomy or short circuit and 17 were dead within a year. However, 32 out of 86 patients submitted to palliative excision of the primary tumour lived for more than a year and one survived 66 months.

Liver function tests performed on 91 patients with secondaries were abnormal in only 32% of cases, but at least false positive results were unusual (3 in 352 patients without evidence of secondaries). There was no precise correlation between extent of secondaries and the liver function tests. A prospective study of liver enzyme disturbances in the presence of hepatic metastases is now in progress.

REFERENCE
Oxley E M & Ellis H (1969) *Brit. J. Surg.* 56, 149