

Gastro-cutaneous fistula following anterior gastropexy

D. B. MACKIE
M.Chir., F.R.C.S.

M. J. F. WHITAKER
M.B., B.S.

A. E. GENT
M.D., M.R.C.P.

Salisbury General Infirmary, Fisherton Street, Salisbury

Summary

Two patients are described who developed a gastric fistula to the anterior abdominal wall following anterior gastropexy. Both fistulae closed spontaneously without any specific treatment. It is suggested that the fixation of the stomach to the anterior abdominal wall allows the fistula to discharge externally thus preventing peritoneal contamination with its serious consequences.

Introduction

Because of its relative simplicity, anterior gastropexy as described by Boerema and Germs (1955) is being used with increasing frequency in the surgical treatment of gastro-oesophageal reflux. The operation has a low mortality (Boerema, 1969) and the long term results are favourable and some cases better than the more conventional operative procedures. (Magary, 1972). The purpose of this paper is to report two cases of gastro-cutaneous fistula following anterior gastropexy, a complication which the authors have not seen reported previously.

Case reports

Case 1

A 69-year-old man gave a 4-year history of dysphagia. A barium meal demonstrated an oesophageal stricture associated with a hiatus hernia and oesophagoscopy revealed marked oesophagitis. Anterior gastropexy was performed in October 1973. On the eleventh postoperative day there was a profuse discharge from the lower end of the wound and a barium swallow confirmed the presence of a gastric fistula. No specific treatment was given and the fistula healed spontaneously within 10 days. He has remained well since with no further symptoms.

Case 2

A 68-year-old man presented with dysphagia and a long history of chronic dyspepsia. A barium meal confirmed an oesophageal stricture above a hiatus hernia and a duodenal ulcer was also demon-

strated. Gastroscopy confirmed oesophagitis and biopsy showed inflammation changes only with no evidence of malignancy. As he suffered from severe rheumatoid arthritis he was initially treated medically. However, following a substantial haemorrhage from his duodenal ulcer he was referred for surgery and anterior gastropexy together with vagotomy and pyloroplasty were performed in January 1976.

On the thirteenth post-operative day he complained that food was being discharged from his abdominal wound and a gastrograffin swallow confirmed a fistula. Gastroscopy indicated that the site of the fistula was firmly adherent to the anterior abdominal wall. The fistula closed spontaneously over the next 2 weeks. The follow-up barium meal and gastroscopy done nine months later showed no evidence of hiatus hernia; the stricture had resolved and there was no evidence of oesophagitis.

Discussion

The essential features of the operation are firstly to reduce the herniated stomach and lower oesophagus into the abdomen and secondly to maintain this position by suturing the lesser curve to the anterior abdominal wall. On completion the lower oesophagus and proximal lesser curve should feel like a tense cord. When placing the fixation sutures bleeding may occur and occasionally this can be stopped only by tying the suture. If two adjoining sutures are tied it is possible that a localized area of ischaemia occurs with resulting fistula formation. In the second case the reduction in gastric blood flow which occurs after vagotomy may have been an additional factor (Mackie and Turner, 1971).

As the lesser curve is fixed to the anterior abdominal wall surrounding the area of necrosis, a cutaneous fistula develops and widespread peritonitis does not occur. The complication is relatively harmless in comparison to lesser curve perforation following highly selective vagotomy which is also thought to be due to gastric ischaemia (Newcombe, 1973).

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