Afferent Loop Syndrome Due to Scarring of a Stomal Ulcer Following a Billroth II Gastrectomy

Afferent loop syndrome following a Billroth II gastrectomy is usually caused by either an internal hernia, a long afferent loop, a kinking of the anastomosis, an adhesive band, or recurrent carcinoma (1,2). While edematous swelling due to a stomal ulcer occasionally compromises the afferent loop (2), this syndrome rarely occurs in relation to the healing process of a stomal ulcer (3).

A 60-year-old woman who had undergone a Billroth II gastrectomy developed epigastralgia on the seventeenth postoperative day. Since endoscopy revealed an open stomal ulcer that was covered with blood, a fasting regimen was indicated. Endoscopy on the fortieth postoperative day revealed that the stomal ulcer had healed (Figure 1a). She then began oral ingestion again, but bilious vomiting occurred ten days later. Endoscopy showed a scarring of the stomal ulcer (Figure 1b), and gastrography showed an obstruction of the efferent loop (Figure 2). A partial resection of the remaining stomach was carried out, and the resected specimen revealed a stomal ulcer that was 3 cm in length and extended into the efferent loop.

While it is generally agreed that a stomal ulcer following a gastrojejunostomy often occurs at the jejunal site (4), it is usually difficult to obtain adequate visualization of stomal ulcers, especially when they are covered with blood. In this case, the scarring of the stomal ulcer that extended into the efferent loop eventually resulted in a stenosis of the efferent loop. Since bleeding and perforations have been emphasized as the major causes of emergency operations for stomal ulcers (5), this case was initially managed with a strict fasting regimen. However, if the passage of food through the efferent loop had instead been continued during the healing process of the stomal ulcer, then the development of stenosis in the efferent loop might have been prevented.

S. Tsutsui[†], M. Kitamura[†], K. Shirabe[‡], H. Baba[‡], K. Sugimachi[‡]

Department of Surgery, Munakata Medical Association Hospital, Munakata, Japan

² Department of Surgery II, Faculty of Medicine, Kyushu University, Fukuoka, Japan

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Corresponding Author S. Tsutsui, M.D. Department of Surgery Munakata Medical Association Hospital Oaza-Taguma 1201-1 Munakata 811-34 Japan Fax No: 0940 371807

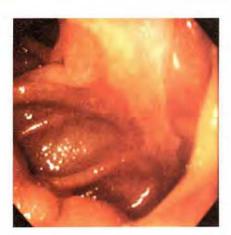


Figure 1: Endoscopy revealed a stomal ulcer at the jejunal site of the anastomosis. The stomal ulcer, which was long and extended into the efferent loop, was observed to have healed on the fortieth postoperative day (a). However, scarring of the stomal ulcer induced stenosis of the efferent loop on the fifty-eighth postoperative day (b).

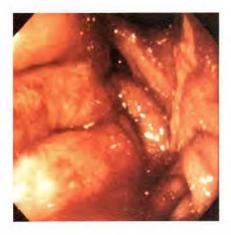




Figure 2: Gastrography revealed a dilated and elongated afferent loop and a pouch at the entrance of the efferent loop. In addition, the contrast medium did not enter the efferent loop.