Letter to the editor

Modified Billroth-I reconstruction after distal gastrectomy

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To the Editor:

Although Billroth I (B-I) or Billroth II (B-II) has traditionally been the method for reconstruction after distal gastrectomy, Roux-en-Y (R-Y) is now being increasingly employed at many institutions, mainly to prevent duodenogastric reflux and to ensure safe anastomosis. We do perform R-Y in our department, but only in limited cases in patients with special conditions, i.e., locally invasive tumors in the pylorus or the antrum in which the tumor may recur locally, or in patients having a subtotal distal gastrectomy for which a gastro-duodenal anastomosis would result in excessive tension. The advantages of R-Y after distal gastrectomy include the absence of or a low incidence of reflux gastritis and esophagitis [1] and a possible reduction in the future development of stump carcinoma [2]. On the other hand, with R-Y, stomal ulcer may develop [3, 4] and the incidence of cholelithiasis, for which endoscopic sphincterotomy is almost impossible, may increase [5, 6]. The notorious Roux stasis syndrome [7] may also develop in some cases.

The advantages of B-I over R-Y include food passage through the physiological route, single anastomosis, low risk of stomal ulcer or cholelithiasis, and easy access to the duodenal papilla in case there is cholelithiasis or pancreatic disease. Thus, we select B-I reconstruction whenever possible.

Because the main problem with B-I is duodenogastric reflux, we recently developed a modified B-I technique, in which the gastric mucosa is inverted like a check-valve in the duodenum to prevent reflux (Fig. 1). Since we first reported the technique in 2007 [8], ten such patients have been followed up for a mean of 17.7

Fig. 1. Schematic view of the newly developed modified Billroth I technique. With permission from the publishers of *Surgery* [8]

months (range, 8–30 months). Follow-up endoscopy always showed a clear gastric stump with no or little bile (Fig. 2). We expect this technique to be tested by many gastric surgeons.

References

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Fig. 2. Endoscopic pictures of the remnant stomach and anastomosis after modified Billroth-I reconstruction

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