Esophageal reconstruction is performed for bypass or replacement of the esophagus after resection for benign or malignant disease. Reconstruction may employ colon (right or left), jejunum, stomach (whole or tube). Our preference is isoperistaltic left colon for reconstruction when a long time life expectancy is anticipated as in benign disease or favorable cases of malignancy.

This paper is based on personal experience with 240 cases of esophageal reconstruction from 1969-1986 for benign (60) or malignant (180) disease. Postoperative (30 day) mortality occurred in 20 cases (8.3%). Left colon interposition was used in 78 cases and stomach in 147. Technical details are emphasized. In the colon series technical complications occurred in 15% (colon infarction 5%, colon perforation 4%, anastomotic leak 6%). A similar complication rate including leakages (6%), gastric perforation and infarction was seen after stomach reconstruction, but complication effects were more severe.

In a long term followup average (5 years) of our team's University of Chicago cases of left colon interpositions between 1974-1986, 75% of patients reported excellent or good results and these were confirmed by objective tests in 72%. In comparison 67% of gastric reconstruction patients have a good result with a high incidence of gastroesophageal reflux and its complications including bleeding and stricture in long term survivors.

Colon interposition remains our procedure of choice when long term survival is expected.

MATERIAL AND METHODS The originality of our technique is mainly represented by the total removal of the rectum maintaining the external sphincter which will play a basic role in preserving the sphincter competence. Complete removal of the rectum offers better guarantee of radicality compared to other procedures. It allows to perform the anastomosis at the level of the anal canal extending the indications to sphincter saving procedures for cancers up to 5.5 cm from the anal verge. Absolute contraindications to this technique are the following: the neoplastic invasion of the levator ani muscles or the sphincter area and a deficiency of the sphincter function. We employed this technique in 17 patients with carcinoma of the rectal ampulla located between 5.5 and 9 cm from the anal verge.

RESULTS We had no mortality, neither stenosis, nor fistulas. A good anal continence for feces and gas was present in all the patients one month after the operation, with one-two bowel movements/day. Manometric and electromyographic studies showed a normal sphincter function. We had one endoluminal and one pelvic recurrences and radical removal of these recurrences were possible. The remaining 15 patients are still alive and tumor free at a median follow-up of 42 months.

CONCLUSIONS Due to local recurrences a more careful selection of the patients is mandatory, as well as for all the sphincter saving procedures.