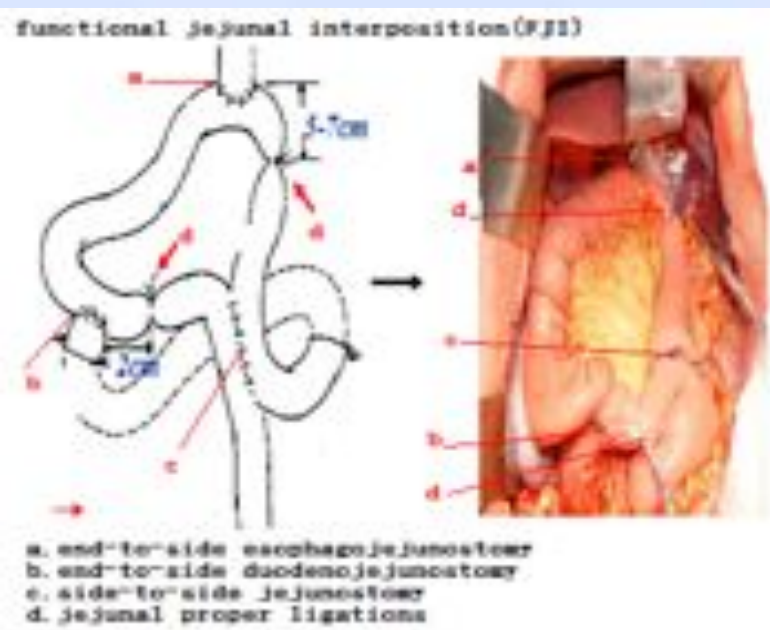


New Reconstruction After Total Gastrectomy

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Operation procedures:

- first, an end-to-side esophagojejunostomy was performed at 40 cm anal to Treitz's ligament.
- Then, an end-to-side duodenojejunostomy was created at the efferent limb 35 cm distal to the esophagojejunostomy, followed by a side-to-side jejunostomy at 5 cm distal to duodenojejunostomy and 20 cm distal to Treitz's ligament.
- Finally, 2 jejunal proper ligations were made at 5 cm oral to esophago- jejunostomy and 2 cm distal to duodenojejunostomy.

Superiority:

retaining the intestinal integrity : The continuity of the gastrointestinal tract plays a key role in the coordination of intestinal motility.

duodenal food passage : preserving duodenal food passage should enhance the digestive function.

proper jejunum ligation: by changing the operation procedure with proper jejunum ligation, FJI is less time-consuming and less costly.

A total of 704 patients who underwent total gastrectomy for gastric cancer between December 1985 and December 2003 in Tianjin Medical University Cancer Hospital were enrolled for this study. 6 types of reconstruction were pictured below.

Methods of reconstruction



Six alimentary reconstruction procedures were performed after standard total gastrectomy with D1 to D3 lymphadenectomy. According to intestinal integrity after surgery, these six procedures were divided into two categories, jejunal continuity and jejunal transection.

Procedures of jejunal continuity, including Braun's anastomosis (48 patients), modified Braun I (239 patients), modified Braun II (117 patients), and functional jejunal interposition (68 patients) were performed to maintain the intestinal integrity.

However, procedures of jejunal transection, including "P" Roux-en-Y (87 patients), and "P"-shape jejunal interposition (45 patients) were accomplished with jejunal transection.

The duodenal food passage was preserved only by FJI and PJI.

Both jejunal continuity was maintained and duodenal food passage was preserved only by FJI

Postoperative Complications Compared Among Different Reconstructions

Group	Method	Reflux Esophagitis	Dumping Syndrome	Anemia	Roux-en-Y Syndrome
Jejunum transected	F-Jejunal Interposition (n = 45)	22.2%	8.9%	8.9%	22.2%
	*F-Roux-en-Y (n = 37)	24.3%	29.7%	17.4%	48.3%
	Total (n = 121)	13.9% ^a	21.7% ^b	11.4 ^c	47.4% ^d
Jejunum untransected	Brown (n = 48)	14.7%	22.9%	20.8%	22.9%
	in Brown I (n = 128)	8.2%	28.1%	29.2%	14.2%
	in Brown II (n = 127)	11.3%	20.9%	17.9%	15.9%
	FJI (n = 148)	6.8%	18.2%	8.3%	18.2%
	Total (n = 572)	9.36% ^a	19.6% ^b	14.9% ^c	14.7% ^d

P value: a, p=0.02; b, p=0.42; c, p=0.32; d, p=0.05



results from this retrospective study suggested that FJI reconstruction can reduce postoperative complications such as reflux esophagitis, Dumping Syndrome, Anemia and Roux-en-Y Syndrome. FJI has potential application to improve the quality of life after total gastrectomy.