

Percutaneous Remnant Gastrostomy Decompression After Roux-en-Y Gastric Bypass

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Introduction

Roux en Y gastric bypass is one of the most common bariatric procedures performed in the United States. Distention of the excluded gastric remnant during the post-operative period places patients at risk for disruption of the suture or staple line.

Based on review of literature, current methods of access to the gastric remnant include laparoscopic, ultrasound, fluoroscopic and CT-guided approaches.

Indications include access for nutritional support, to relieve distention secondary to delayed emptying or biliopancreatic limb obstruction, or management of anastomotic leak in the early or late post-operative period.

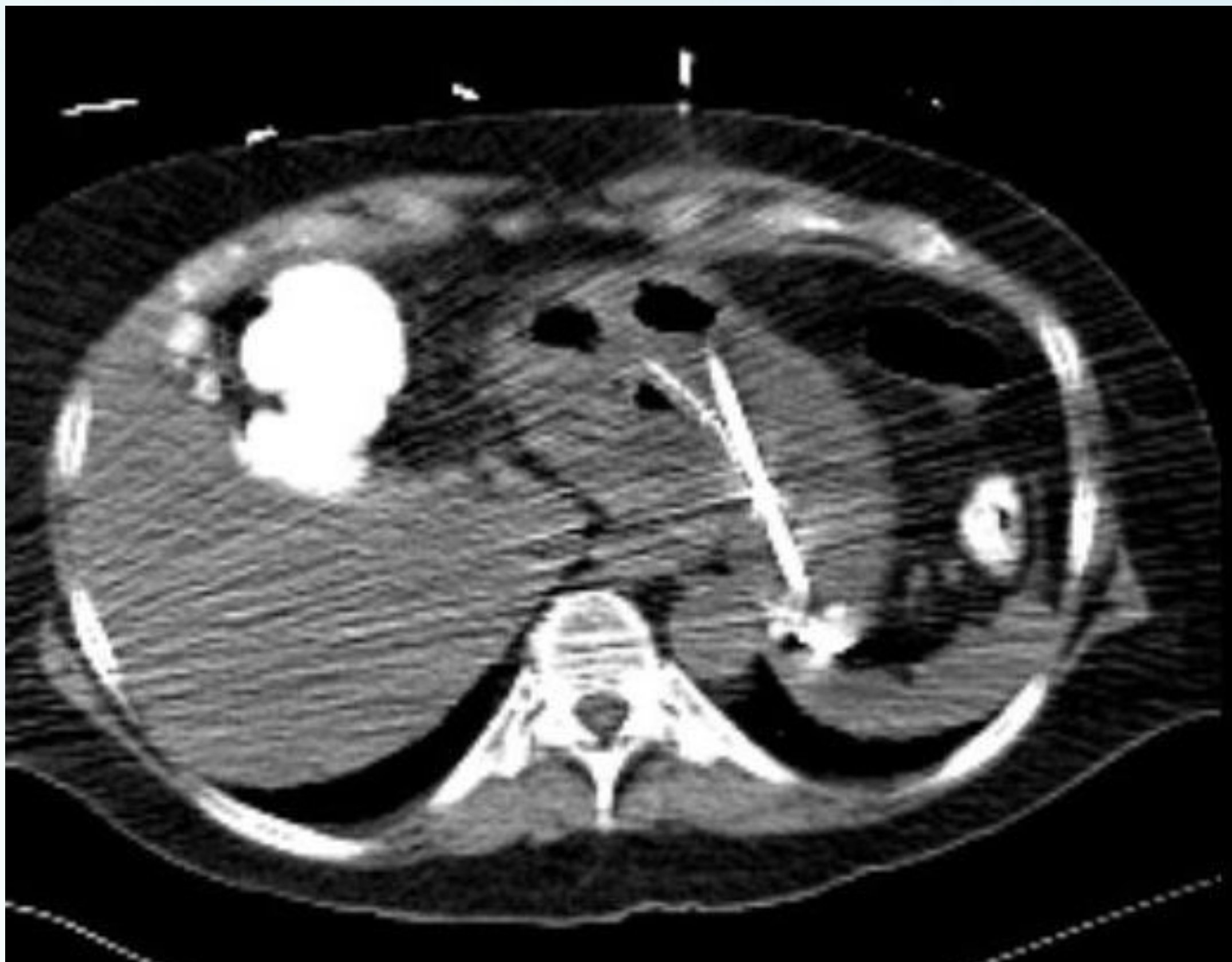
There is a scarcity of data to support CT-guided access to the gastric remnant in the early post-operative period.

Objective

The purpose of the study is to report on the safety and efficacy of percutaneous remnant gastrostomy tube placement in the early post-operative period of patients undergoing Roux en y gastric bypass (RYGB).



Figure 1 and 2 (above): CT scan showing distention of gastric remnant secondary to obstruction of biliopancreatic limb. Figure 3 and 4 (below): CT scan following placement of percutaneous gastrostomy tube.



Methods

A retrospective review of a prospectively collected database was performed to identify patients at a single independent academic hospital who underwent percutaneous gastrostomy tube placement within the first 30 days of a laparoscopic RYGB between January 2014 and July.

The jejunostenostomy was performed as a side-to-side, functional end-to-side with a stapled closure of the common enterotomy.

Results

- A total of 3 patients were identified. All three patients were women, aged 36-67 (mean 50.4, SD 15.7).
- The BMI range was 28.6-54.4 (mean 40.9, SD 13.0). One patient with a BMI of 28.58 was a revision from vertical banded gastroplasty to Roux en Y.
- The tubes were placed between post-operative day (POD) 2-8, during the same admission as surgery for two and during a readmission for one patient.
- There were no complications from tube placement.
- The tubes stayed in place for 40-71 days (mean 52.7, SD 16.3).
- All tubes were removed in the office without difficulty.
- None of the patients required re-operative intervention.

Conclusion

Access to the gastric remnant in the early post-operative period following RYGB can be safely achieved by the radiologic percutaneous route.

Patients requiring percutaneous gastrostomy in the early post-operative period were able to go home with drains for continued decompression and avoided return to operating room for surgical intervention.

Radiologic gastrostomy is a safe approach that effectively resolves distention of the excluded gastric remnant during the early post-operative period.

Age	Male/Female	BMI	Operative time	POD tube	Complications	ROR	Total days tube
35	Female	54.4	1:41	3	None	N	47
48	Female	39.6	2:10	2	None	N	71
72	Female	28.58*	7:19	8	None	N	40

Table 1. Details of percutaneous remnant gastrostomy tube placement. BMI = Body mass index, POD = Post-operative day, ROR = return to operating room. *: this case was a revision of vertical banded gastroplasty to Roux-en-Y.