

## **Surgical Repair of Iatrogenic Duodenal Injuries with a Roux-en-Y Duodenojejunostomy: A Physiology-oriented Approach**

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### **Abstract**

*Introduction:* Iatrogenic duodenal injuries represent a condition associated with high morbidity and even mortality. Management is still controversial with a lack of consensus among experts regarding the optimal treatment. The purpose of the present study was to test and assess the results of a certain reconstruction technique.

*Materials and Methods:* Four patients (2 males and 2 females) of a mean age of 83 years with iatrogenic duodenal injuries underwent surgical repair of the duodenal perforation, with a two-layer duodenojejunostomy and a Roux-en-Y jejunal loop.

*Results:* Three out of four patients (75%) had a rapid and uncomplicated recovery (13 days mean postoperative length of hospital stay), while the fourth patient died in the ICU due to ARDS three weeks later, without however evidence of anastomotic leak.

*Conclusion:* A variety of surgical repair techniques have been proposed to date; however, with controversial results. A repair using an isolated jejunal Roux-en-Y loop seems to fulfill all the optimal prerequisites for a successful anastomotic outcome and proved efficient in its certain form for the given patient sample.

**Key words:** iatrogenic duodenal injuries, Roux-en-Y jejunal loop