

T-TUBE DUODENOSTOMY FOR THE DIFFICULT DUODENUM: A CASE SERIES

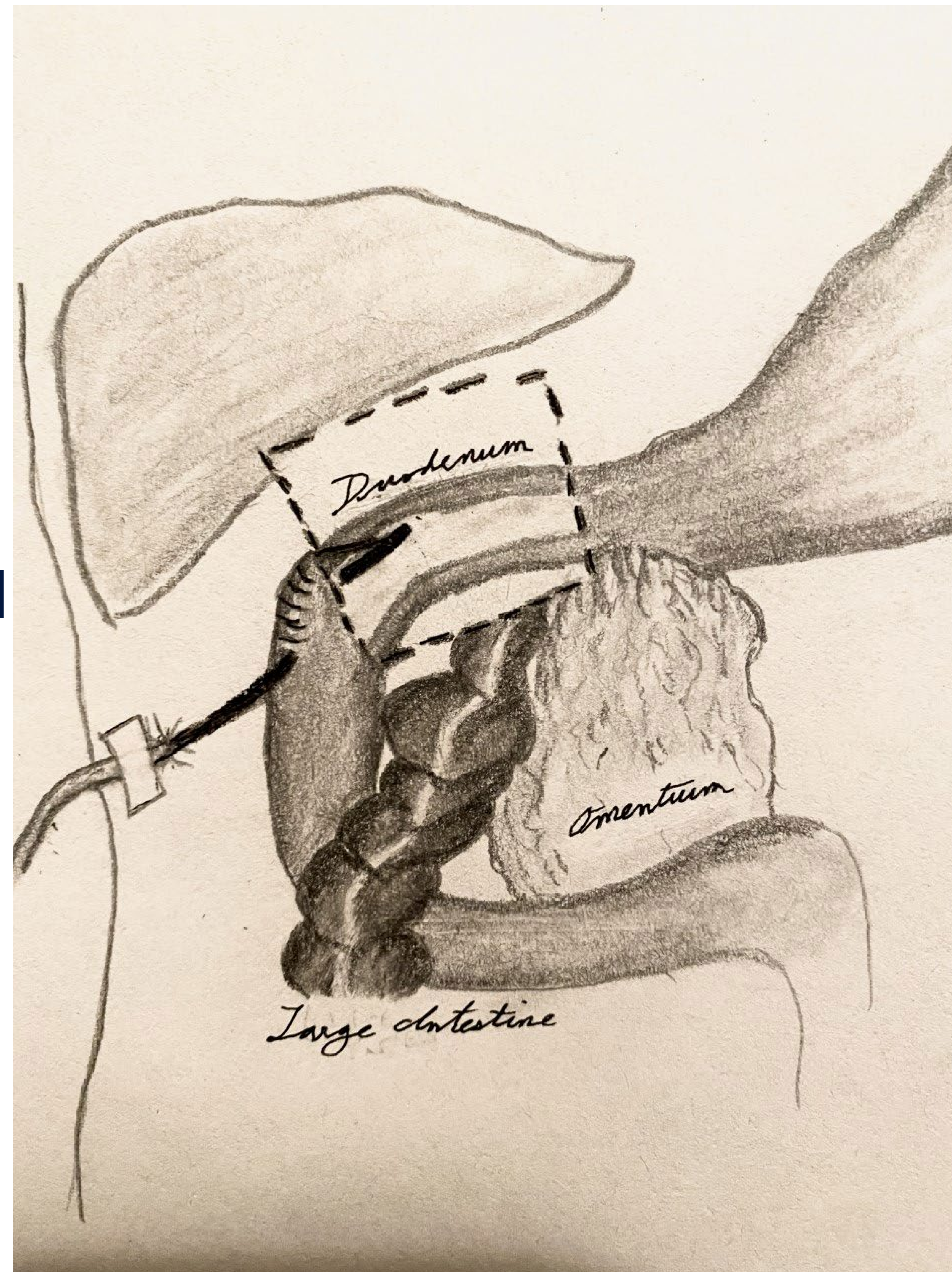
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Introduction

Tube duodenostomy has been described as a useful technique in the management of the difficult duodenum arising from a variety of pathologies. In addition, the use of a t-tube for the duodenostomy presents a resourceful option in the event of Malecot or other such catheter unavailability. The aim of our study is to describe the technique and outcomes associated with this approach.

Methods

During a six-month period in 2020, a t-tube duodenostomy was performed in 3 patients for duodenal stump perforation in a patient with Roux-en-Y esophagojejunostomy anatomy, duodenal stump closure security following Billroth II gastrectomy for peptic ulcer disease, and decompression following combined partial primary closure and Graham patch repair of giant duodenal perforation. In all cases, definitive primary duodenal closure was not possible secondary to anatomic pathology. All duodenostomies were performed with a t-tube that was trimmed with the back wall divided and then secured via Witzel approach.



*Image drawn by a resident

Results

The t-tube duodenostomies were performed during the index operations of all patients. No patients required additional operations. There was no mortality. All patients were closely monitored postoperatively with duodenostomies kept in place for 6 weeks. One patient developed a small leak after a trial of tube clamping which was managed with continued tube drainage and antibiotics prior to definitive removal. The mean length of stay was 20.3 days with two patients being discharged to rehab.

Conclusion

T-tube duodenostomy is a simple technique that helps avoid blowout of the vulnerable duodenal stump in situations of biliopancreatic limb pathology, ulcerative disease, or injury. This method was necessitated in these instances due to lack of Malecot availability, but may offer an improved technique for temporary duodenal drainage.