

FEASIBILITY OF LAPAROSCOPIC GRAHAM PATCH REPAIR (LGPR) OF A PERFORATED DUODENAL ULCER IN A MINIMALIST SETTING

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Introduction

Emergent surgery is indicated for perforated peptic ulcers. The use of laparoscopic management as a first choice for ulcer perforation surgery is gaining ground but is not routine. In this report, we aim to report our experience with laparoscopy as the first approach for the repair of duodenal perforation even during scarcity of resources.

Method

This is an acute presentation of duodenal perforation which was repaired laparoscopically even in a minimalistic setting. This was being done in a veteran hospital setting late night, where we were short of resources at the time. We did not have usual laparoscopic needle holder or driver at that moment. The surgery was performed with laparoscopic disposable forceps (which can barely hold the needle); using which graham patch repair of duodenal bulb perforation was done. Several staying sutures were placed using '0' nylon and then, omentum was wrapped on perforated site.

Results

We encountered 2cmx2cm perforation located at duodenal bulb anteriorly, in the post-pyloric region with gross spillage. Post-closure, methylene blue leak test confirmed no leaks. Patient had minimal blood loss during the procedure. Upper GI series on day 8 demonstrated no extravasation. Patient recovered without any complications.

Conclusion

- ❖ Laparoscopy in the treatment of perforated duodenal ulcer is safe and can be utilized as a routine approach.
- ❖ Usually omentum is used for graham patch repair of the perforated ulcer using modified or simple graham patch repair technique.
- ❖ Without its presence, we can also use falciform ligament or small bowel wall for closure of defect.
- ❖ We conclude that during surgical emergencies like perforated peptic ulcer, even in the minimalist settings with few resources, laparoscopic repair can still be done at the hands of an experienced laparoscopic surgeon with the help of a coordinated and skilled teamwork to save life of a patient.



Figure 1. Disposable laparoscopic Grasper used in this patient.

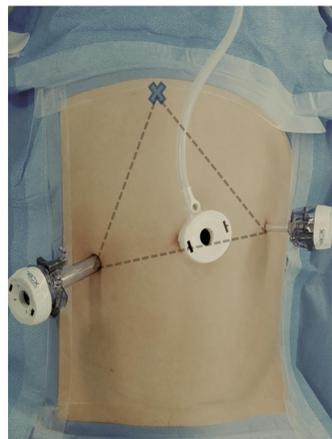


Image I

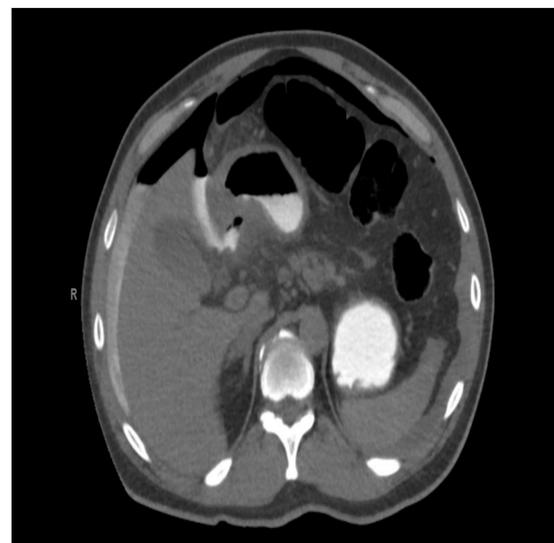


Image II



Image III

Image I: Intraoperative image demonstrating port placement. Image II: Emergent CT scan of the patient showing free intraabdominal air in axial view. Image III: CT imaging in coronal view demonstrating free intra abdominal air in the case of acute duodenal perforation in this patient

References

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