MESENTERIC ABSCESS FOLLOWING LAPAROSCOPIC ROUX-EN-Y GASTRIC BYPASS IN THE SETTING OF A VENTRICULOPERITONEAL SHUNT

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Introduction:
Obesity is associated with many comorbid conditions, including idiopathic intracranial hypertension (IIH). Management of IIH can include placement of a ventriculoperitoneal shunt, which drains cerebrospinal fluid (CSF) into the abdomen to decrease intracranial pressure. VP shunts are also placed for other conditions which increase intracranial pressure or CSF production.

Patient Presentation:
38-year-old female with a history of VP shunt for hydrocephalus in infancy underwent LRYGB for morbid obesity (BMI 43.55 kg/m^2). Her initial post operative course was uneventful, and she was discharged on POD #1. She re-presented to the ER on POD #15 after syncope, as was found to have elevated WBC to 15.6. CT scan revealed a mesenteric abscess (Figure 1).

Management:
Broad-spectrum antibiotics were initiated, and she underwent laparoscopic converted to open drainage of the abscess located within the mesentery of the common channel. A small bowel resection with primary anastomosis was performed due to trauma associated with the dissection; no succus or enterotomy were identified.

Two VP shunts were visualized intraoperatively (Figure 2; one was nonfunctional) and after discussion with the neurosurgery team, the functional shunt was exteriorized from the right upper quadrant and the intraperitoneal section of the non-functional shunt was removed.



Figure 1 : CT scan showing mesenteric abscess.

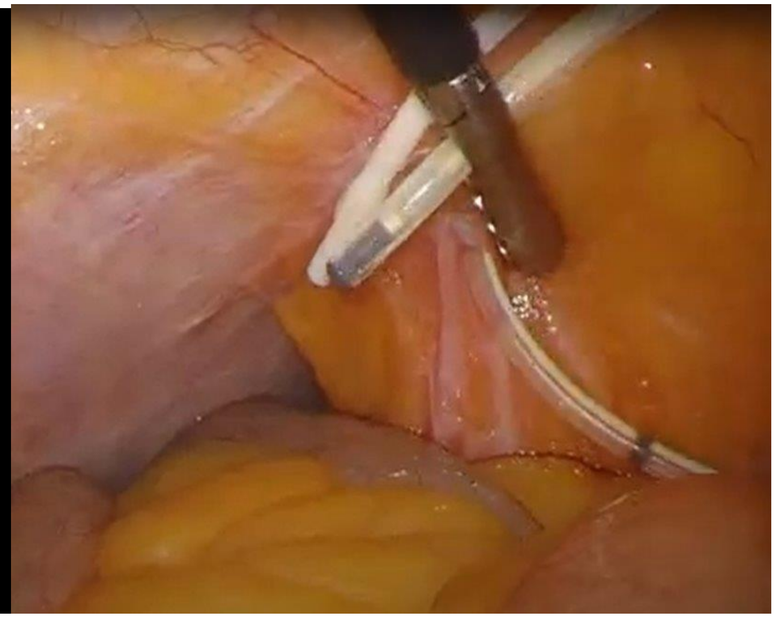


Figure 2: VP shunts in-situ at LRYGB.

Clinical Course:
Cultures of the abscess grew *Enterococcus faecalis* , *Klebsiella oxytoca*, and *Citrobacter freundii* complex.

The patient was closely monitored with serial shunt cultures, all of which revealed no growth. She remained on IV antibiotics, and the VP shunt was re-internalized under laparoscopic visualization on POD #12 after laparotomy (POD #28 after LRYGB). IV antibiotics were continued for a total of 14 days, and the patient was then discharged home.

Discussion:
We report the successful management of a case of mesenteric abscess after LRYGB in a patient with a history of hydrocephalus and a VP shunt. Management included source control with surgical drainage, systemic antibiotics, and temporary shunt exteriorization, followed by shunt re-internalization after clearance of infection.

The mechanisms of mesenteric abscess formation after LRYGB may include infected hematoma, anastomotic leak, missed enterotomy, or deep space surgical site infection. Management of these complications in the setting of a VP shunt involves prompt diagnosis and source control, antibiotic therapy, and exteriorization of the shunt to prevent shunt infection and ventriculitis, followed by re-internalization after clearance of the intra-abdominal infection.

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