Hemobilia After Liver Biopsy During Elective Sleeve Gastrectomy

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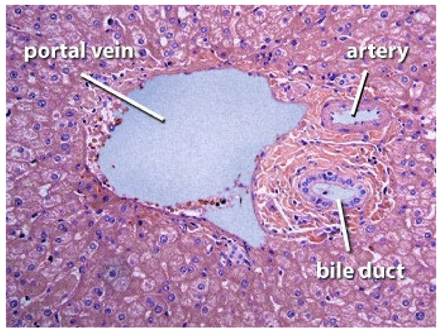
INTRODUCTION

Robotic Sleeve Gastrectomy is a common procedure known for it's safety and efficacy in bariatric surgery. The prevalence of Non-alcoholic Steatohepatitis (NASH) is significant in obese patients, which places them at increased risk for future development of cirrhosis. Currently, routine liver biopsy is not widely accepted as standard practice. Liver biopsy can provide the benefit of identifying obesity-related liver disease; however, it is not without potential risks, including hemobilia. This rare complication has been reported infrequently following an elective bariatric procedure. We present a case report of hemobilia following elective robotic-assisted sleeve gastrectomy with routine liver biopsy.



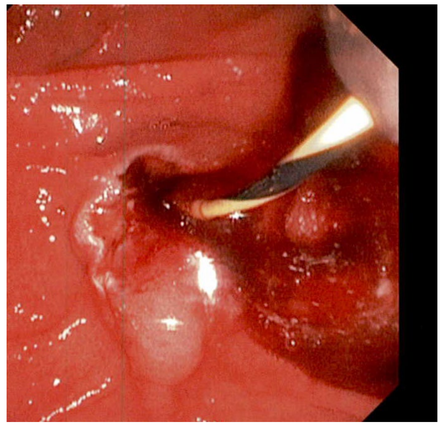


Figure 1: ERCP

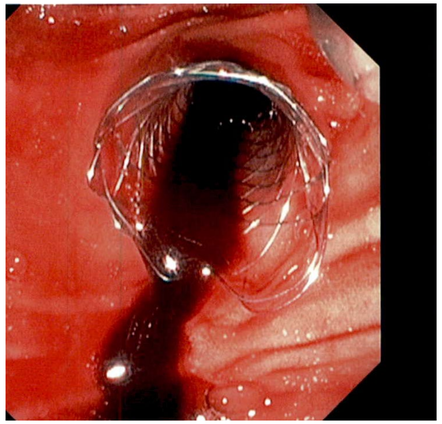


Figure 2: Stent with ongoing bleeding

METHODS AND PROCEDURES

A 62-year-old female with a BMI of 41 with NASH and atrial fibrillation underwent elective robotic sleeve gastrectomy, hiatal hernia repair, upper endoscopy, and core needle biopsy of the liver. Preoperatively received lovenox SC 40 mg. Pre-operative evaluation included upper endoscopy, review of prior CT imaging, and metabolic panel. She also completed a multidisciplinary evaluation as standard of practice before bariatric surgery. Surgery was unremarkable. On postoperative day 1, she was discharged in stable condition. 6 days after discharge, she presented to the emergency department for abdominal pain and jaundice and was found to have a dilated common bile duct on Magnetic resonance cholangiopancreatography. An endoscopic retrograde cholangiopancreatography (ERCP) was performed, revealing multiple blood clots within the biliary tree and a source of bleeding from the intrahepatic ducts (Figure 1). A covered stent was placed. Her stay was complicated by hematemesis, ongoing anemia, and escalation of care to the Intensive Care Unit. She required a repeat endoscopy, which demonstrated ongoing bleeding into the biliary system despite stent placement (Figure 2). Ultimately, she required interventional radiology for angioembolization to her left hepatic artery. The patient recovered and was discharged from the hospital for a total stay of 11 days.

CONCLUSION

Concurrent sleeve gastrectomy with liver biopsy is not routinely performed. Liver biopsy remains an essential tool for diagnosing and managing liver disease, particularly in the bariatric population. Major complications are rare, and the development of hemobilia represents less than 3% of all liver biopsies. Any traumatic intervention to the liver poses a risk for injury to the blood supply and intrahepatic ducts, which may not be immediately apparent. This case report highlights a rare but serious complication following a routine liver biopsy during a bariatric surgery and should be an ongoing consideration.

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