Therapeutic endoscopic retrograde cholangiopancreatography without ultrasound or fluoroscopy in pregnancy

Pregnancy is associated with an increased risk of gallstone formation, with a reported incidence between 4% and 12% [1]. Choledocholithiasis may lead to cholangitis and/or gallstone pancreatitis, either of which can be life-threatening to both mother and fetus [2], with mortality rates of up to 15% and 60%, respectively [3].

A young pregnant woman at 28 weeks of gestation was admitted with gallstone pancreatitis. She was anicteric but febrile, with raised serum amylase and alkaline phosphatase. Transabdominal sonography revealed a swollen pancreas, cholelithiasis, and a dilated common bile duct (14mm) with stones. Endoscopic retrograde cholangiopancreatography (ERCP) was performed under propofol sedation on the next day with maternal-fetal monitoring performed throughout the procedure; fetal heart tones were documented prior to sedation and immediately upon completion of the procedure. Selective common bile duct (CBD) cannulation was done with a standard sphincterotome and guide wire (Jagwire 0.035 inch); active bile aspiration confirmed the correct position of the sphincterotome. After sphincterotomy, a 10-French, 10cm plastic stent was deployed in the CBD, which showed free flow of bile. The entire procedure lasted approximately 15 min. No fluoroscopy or spot radiographs were used during the procedure. A later abdominal ultrasound scan demonstrated remarkable decompression of the biliary system with the stent seen correctly placed in the CBD (Fig. 1). The patient remained well and was discharged on the third day after admission. She has been counseled to present for repeat ERCP after the end of her pregnancy.

During pregnancy, nonradiation ERCP by an experienced hand is a safer option than ERCP using fluoroscopy. In addition,

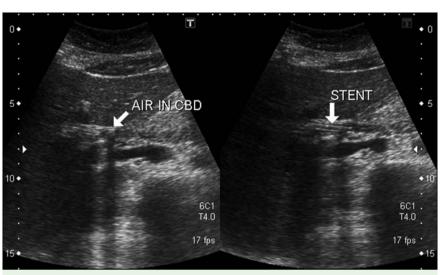


Fig. 1 Ultrasonogram showing the stent correctly placed in the common bile duct (CBD).

nonradiation ERCP can be performed where the fluoroscope facility is not available, or at times when the apparatus is out of order and a septic patient desperately requires biliary drainage. However, such situations require only to be dealt with by an experienced and trained gastroenterologist in order to save life.

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