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Invited Commentary

A commentary on "challenges encountered in the management of gallstone-induced pancreatitis in pregnancy" (Int J Surg 2019;71:72–8)

Dear Editor,

We read the recent comprehensive review article by Samaraee et al. with great interest [1]. In this review, the authors systematically and critically analyzed the published evidence on pre-interventional imaging modalities and interventional options to highlight that gallstone-induced pancreatitis in pregnancy should be managed with a multidisciplinary team approach, while conservative management would have a high chance of early recurrent attacks. Importantly, the question remains whether early ERCP or cholecystectomy is safe in pregnant patients.

A population-based study by Luthra et al. [2] revealed that ERCP and cholecystectomy for gallstone-induced pancreatitis were inversely associated with early (30-day) readmission in pregnant women. To avoid miscarriage or premature labor during the first or third trimesters, clinicians tend to perform invasive interventions in pregnant women preferentially during the second trimester. However, delaying necessary invasive interventions in pregnant patients could lead to serious and life-threatening consequences to both the mother and fetus. Thus, input by a multidisciplinary team of experienced clinicians is necessary to come up with an appropriate management plan for these patients. The team should involve highly experienced surgeons, perinatologists, obstetricians, obstetric anesthesiologists and radiation safety officers.

The main concerns in using ERCP in pregnant women include potential fetal teratogenic and carcinogenic effects secondary to radiation exposure, as well as post-ERCP pancreatitis in the mother. The most important factors determining fetal radiation exposure are total radiation time and dosage. Draping the lower abdomen and pelvis of the mother with lead shields is beneficial in minimizing uterine radiation exposure. Dosimetry monitors should be placed externally on top of the uterus to monitor the fetal radiation exposure [3]. In addition, as post-ERCP pancreatitis occurs more frequently in pregnant women, therapeutic ERCP should only be performed by highly qualified and experienced ERCP endoscopists to maximize radiation safety and minimize potential risks. As open or laparoscopic cholecystectomy may increase the risk of premature uterine contractions and fetal loss, each case should be individually and thoroughly assessed by weighing the risks against the benefits. Severe acute pancreatitis or cholangitis caused by gallstone impaction in the common bile duct or at the ampulla requires urgent intervention regardless of the gestational age.

In summary, our commentary is written to support the recommendations made in the review article to draw the attention of clinicians to the necessity of timely invasive intervention which is indicated in some pregnant patients with gallstone-induced pancreatitis.

Conflicts of interest

None.

Provenance and peer review

Invited Commentary, internally reviewed.

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