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Invited Commentary

A commentary on "Challenges encountered in the management of gallstone-induced pancreatitis in pregnancy" (Int. J. Surg. 2019; 20: 72–78)

Dear Editor,

We read with great interest the recent peer-reviewed article by Samaraee et al., [1] entitled "Challenges encountered in the management of gallstone-induced pancreatitis in pregnancy". In this paper, the authors discussed on the timing of surgery and the mode of surgery when cholecystectomy is needed in gallstone-induced pancreatitis in pregnancy. The type of surgical intervention between laparoscopic versus open cholecystectomy was emphasized based on published literatures. However, surgical timing during pregnancy was not addressed clearly.

At present, no RCTs have provided definitive evidence on surgical timing during pregnancy. The stage of pregnancy and the severity of the disease can affect the decision of surgical intervention directly. A retrospective cohort study by Juo YY et al. [2] revealed that early cholecystectomy should be considered in gallstone-induced pancreatitis in pregnancy to reduce readmission and cumulative financial burden. Available data demonstrated that no significant differences exist in the overall morbidity and 21 individual complications, including infected, cardiac and renal complications between pregnant and non-pregnant women undergoing similar general surgical operations in a propensity-matched study. [3] Nevertheless, In the three stages of pregnancy, the second trimester is believed to be the optimal for cholecystectomy in pregnancy, with the lowest risk of fetal morbidity [4].

In our clinical practice, in addition to the stage of pregnancy, the severity of pancreatitis is also a critical factor in surgical decision. For mild pancreatitis, a conservative treatment is carried out during the first trimester, and cholecystectomy is delayed to the second trimester if possible to decrease pancreatitis relapse. However surgical treatment is necessary at the first trimester in gallstone-induced pancreatitis in patients with gangrenous cholecystitis and gallbladder perforation. Any unnecessary delay to surgical treatment can lead to life-threatening complications to both mother and fetus. In moderately severe pancreatitis and severe pancreatitis, spontaneous abortion may occur. Elective abortion should be considered when the diseases may cause fetal malformation or endangers maternal safety. Interval cholecystectomy should then be performed in a later date. As for the third trimester, cesarean delivery may be considered if the fetus is mature, or medical treatment can be selected to promote fetal maturation. Interval cholecystectomy can then be performed. In addition, AP can be induced by a gallstone impaction in the common bile duct. Cholecystectomy combined with common bile duct exploration or ERCP + endoscopic stone removal should be recommended in pregnant patients [1,5].

In conclusion, this is a well-organized comprehensive review to provide clinical reference for clinicians. Our commentary reminds our readers that surgical timing depends on the stage of pregnancy and to some extent, the severity of the disease.

Provenance and peer review

Invited Commentary, internally reviewed.

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