Gallstone disease during pregnancy

PhD thesis - Half time review seminar
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Abstract

Background: Pregnancy is an independent risk factor for the formation of gallstones, as is obesity and female sex. The most common complication related to gallstones is cholecystitis with an incidence of 0.5-0.8% in pregnant patients, making it the second most common non-obstetric cause of acute abdomen during pregnancy. Additionally, biliary colic, pancreatitis, choledocolithiasis and cholangitis are other complications that might require surgical intervention.

Historically, cholecystectomy was considered dangerous for the mother and fetus and recommendations were to treat these patients conservatively. Modern research and technologic development have changed this view.

Aim: The aim of this thesis is to investigate consequences of surgery during pregnancy.

Methods: We used local data from two Swedish hospitals, examining outcome for patients subjected to surgery and compared this with conservatively treated patients. We also analyzed differences in treatment strategies over time.

By combing the well validated Swedish registry for biliary surgery and ERCP (GallRiks) and the Scandinavian registry for bariatric surgery (SOReg) we have identified patients previously subjected to bariatric surgery that underwent cholecystectomy during pregnancy and analyzed outcome in this previously not researched patient group.

We have also combined GallRiks with the Swedish birth registry, identifying patients subjected to biliary intervention during surgery and extracted outcome data for both mother and fetus and a matched control group with pregnant patients not subjected to biliary intervention (1:5), for comparison.

With the purpose of examining the experience of surgical intervention during pregnancy we have conducted a survey, using both our own questionnaire as well as Beck’s Depression Index II.

Preliminary results: In our first study more patients were subjected to surgery in the late time period, with similar results regarding safety and outcome. A majority of conservatively treated patients are subjected to surgery within two years of delivery.

In our second study we found that there are no significant differences in complications for pregnant patients subjected to cholecystectomy after previous bariatric surgery, as opposed to nonpregnant patients that have a doubled risk of complications after bariatric surgery.

Significance: The decision to perform surgery in a pregnant patient is not easy. This PhD thesis will add to the growing body of knowledge regarding this rapidly increasing patient group.
Publication


Manuscript

Hedström J, Nilsson J, Andersson R, Andersson B. Cholecystectomy after previous bariatric surgery with special focus on pregnant patients - results from two large nationwide registries. Submitted Obesity Surgery 2019, in revision