

Using of ultrasonic method for determining the safe place of trocar introduction in laparoscopic operations, complicated by adhesive process.

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Введение

Introduction. According to the International Adhesion Society, postoperative adhesive process is the most frequent complication of surgical interventions. Clinical and sectional studies of patients undergoing surgery revealed presence of abdominal adhesions in 70-90% cases. The preoperative detection of the adhesive process in abdominal cavity and choice of the optimal access point for laparoscopic surgery remains complicated question.

Цель исследования

The purpose of this study was to evaluate the localization and prevalence of adhesion process using ultrasonic technology and thereby decrease the possibility of intraoperative complications and conversion to laparotomy.

Материалы и методы

The study was conducted on the basis of 1134 MCMC Grodno. In all patients, «acoustic window» definition was made. The ultrasonic signs of the "acoustic window" are the correct layering of the organs; the maximum mobility of the parietal and visceral peritoneal sheet exceeding 30 mm; the absence of visceroparietal fusion; the normal mobility of the organs during breathing, with a change in the position of the body, in different scanning planes. Moreover ultrasonic scanning was performed filling stomach with water to clarify the anatomical features of internal organs. Five patients participated in the study. One (1) of them had previously undergone gastrectomy, two (2) had previously undergone appendectomy with destructive appendicitis and diffuse peritonitis, two (2) of them had a history of ectopic pregnancy.

Результаты

During the ultrasonic scanning «ultrasonic window» was found in the left hypochondria (3 patients) and in the epigastria region (2 patients). Further viscerolysis was performed under the laparoscope control. Patients underwent 5 laparoscopic cholecystectomies. Postoperative period proceeded without complications.

Выводы

The ultrasonic examination can be useful tool for the determination of the «acoustic window»- the place of safe puncture of the anterior abdominal wall. This method is non-invasive, easy to use, reduces the possibility of conversions in patients with adhesions in the abdominal cavity.