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RESEARCH ARTICLE

Personal experience with perforation of gallbladder during laparoscopic cholecystectomy.

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Abstract

Changes in practice from open cholecystectomy (OC) to laparoscopic cholecystectomy (LC) led to different problems such as biliary tract injuries and intraoperative spillage of gallbladder. In Iraq, articles on conversion to OC were published [1], however, perforation of gallbladder during LC was neglected. Therefore, this study was carried out.

A total of 120 LC patients from Baghdad Teaching hospital was included in the study for the period 15th Aug. 2015 to 15th Jan. 2016. Their age was 42 ± 10.9 years with male to female ration of 0.16:1.Review of case records was carried out. Requested data were demographic, LC procedure, intraoperative findings and duration of procedure.
Perforation of gallbladder was in 54 (45%) of patients. One (2.2%) LC was converted to OC. It was in 6 (35.5%) males and 48 (46.6%) females. Half (50%) of perforated gallbladder were acutely inflamed. Thirty three (61.1%) perforated gallbladders were with thin wall. Twenty one (38.9%) of perforated gallbladder were with dense adhesions. Twenty two (41%) of perforated gallbladders were over distended. Spillage of gall stones was noticed in 19 (35%) of perforated gallbladders. Chronic diseases (diabetes mellitus, hypertension …) was seen in 23 (46%) of the perforated gallbladders.

Intraoperative gallbladder perforation was 45%. Perforation of gallbladder occurs frequently during LC and it was reported in a range of 10-40% [2].The observed figure (45%) is higher than that reported by Suh et al (16.7%) [3], Aytac and Caker (14%) [5] and Khan and Aziz (12%) [6]. Accidental gallbladder perforation during LC is on the rise because of increase attempt at minimally invasive surgery. This difference might be attributed to surgeon toleration of risk by performing LC to acutely inflamed, old aged patients and patients with history of repeated cholecystitis. In their series, Ghnnam et al [7] reported on predicting factors for difficulty in LC as older patients, repeated attacks of cholecystitis. Meticulous dissection, irrigation of the area and sub-hepatic drain might encourage surgeons to tolerate the risks.

The observed conversion rate (0.8%) is much lower than that reported previously in Iraq[1] and internationally [2-4]. Each institution must have a thorough understanding of the rate and the causes of conversion to open surgery based on culture geography. This low observed rate of conversion to OC reflects the experience and skill of the surgeon. It reflects the high training in Baghdad Teaching Hospital.

In the line of other studies [1-7], thick wall of gallbladder, dense adhesions and over distended gallbladder were accompanied perforation of gallbladder.

In conclusion although a high rate of perforation was reported, conversion to OC was extremely low. Experience and skill of surgeon are factor determine the conversion rate to OC.

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