

ranging from 0% to 20% ⁽⁴⁾. This variability is reflective of surgeon experience (including patient selection) and patient-specific risk factors often cited in the literature, including male sex, older age, acute cholecystitis and previous upper abdominal surgery ^(5,6). Male sex is often cited as a risk factor for conversion to the open procedure ⁽⁷⁾.

Acute cholecystitis (AC) often requires emergency admission to the hospital. The traditional treatment of AC was conservative followed by cholecystectomy, usually 6 weeks to 8 weeks after discharge, although early cholecystectomy in patients with AC was shown to be safe and effective many years ago ⁽⁸⁾.

The two main controversies regarding the treatment of acute cholecystitis in patients fit for surgery are the timing of cholecystectomy (either initial conservative treatment followed by delayed cholecystectomy or planned early cholecystectomy), and the selection of the surgical procedure for cholecystectomy (either laparoscopic surgery or laparotomy) ⁽⁹⁾. The currently available evidence predominantly supports immediate cholecystectomy on the basis that early surgery does not increase the risk of operative morbidity and mortality associated with early cholecystectomy ⁽¹⁰⁾ and that such a measure reduces the hospital stay for each patient by up to ten days, in contrast to conservative (late) cholecystectomy ⁽¹¹⁾.

Laparoscopic cholecystectomy for an acutely inflamed gallbladder is technically more demanding than surgery for acute biliary pain without inflammation (biliary colic) because of severe inflammatory adhesions and distortion of the biliary anatomy; and the time interval from admission to surgery may affect conversion rates ⁽¹²⁾. Since its introduction, LC has quickly become the most widely used treatment for gallstone disease, because of substantially less post-operative pain and a shorter recovery time compared to open cholecystectomy (OC) ⁽¹³⁾. Randomized trials have also shown that early LC (within 72 hours of admission) for the treatment of AC is safe, feasible, and associated with a shorter hospital stay ⁽¹⁴⁾.

Methods

A cross sectional study with analytic content was carried out at Al-Kindy Teaching Hospital from the period between January 2008 to January 2011. One hundred and forty patients were admitted to Alkindy teaching hospital and Dar Al-Najat Private Hospital. The patients who were included in this study were divided into 2 groups:

Group 1: included 90 patients presented with signs and symptoms and radiological features of chronic cholecystitis (recurrent attack of pain at right upper quadrant of the abdomen and some times vomiting and by abdominal ultrasound there is single or multiple stones with or without increase thickness of the wall of the gallbladder). Group 2: included 50 patients presented with signs and symptoms and radiological features of acute cholecystitis, presented with right upper quadrant pain which persist for more than twelve hours, fever (temp. > 37.5 °C), vomiting and some of them jaundice, tenderness, muscle guarding and positive Murphy's sign and some cases Boas sign was positive. The clinical diagnosis was supported by ultrasonic features of acute cholecystitis which includes increases in the thickness and edema of the wall, gallbladder distension with the presence of non floating gallstones impacted in the Hartman pouch. They received intravenous fluid, antibiotics and analgesia and nasogastric tube when necessary. All patients admitted to the hospital and prepared for laparoscopic cholecystectomy. Investigations done for all patients including full blood count, random blood sugar, blood urea and serum creatinine, general urine examination, abdominal ultra-sound, chest x-ray, and electrocardiography in patients more than 35 years old.

All patients were operated upon under general anesthesia and endotracheal intubation, classical four ports laparoscopic cholecystectomy was planned and when there was a need for conversion it was done through right subcostal incision.

The main reason for the conversion was inability to safely display and identify anatomical