

The Conversion Rate in Laporoscopic Cholecystectomy in Patients Complaining of Acute and Chronic Cholecystitis

Saad AR Al-Shammari *MBCHB FICMS*

Dept. Surgery, AL-Kindy College of Medicine, Baghdad, Iraq

Abstract

Background	Laparoscopic cholecystectomy is the gold standard in the treatment of cholelithiasis, but there are still some patients requiring conversion to open cholecystectomy for several factors.
Objective	To estimate the conversion rate and evaluate preoperative risk factors for conversion from laparoscopic to open cholecystectomy.
Methods	140 laparoscopic cholecystectomies were carried out from January 2008 to January 2011 at Al-Kindy Teaching Hospital. Preoperative clinical, laboratory and radiographic parameters for these patients assessed and analyzed prospectively.
Results	Conversion to open cholecystectomy was needed in 30 patients (21.4%). Multivariate analysis identified male sex, with positive Murphy's sign, gall bladder wall thickness > 3 mm, a history of acute cholecystitis and time from the onset of symptoms till the time of surgery > 3 days as independent predictors of conversion rate to open cholecystectomy.
Conclusion	The identification of certain risk factors for conversion from laporoscopic to open cholecystectomy preoperatively such as male gender, age more than 40 years, onset of symptoms, gallbladder wall thickness can help the surgeon to plan and counsel the patients about the conversion rate.
Keywords	Acute cholecystitis, laporoscopic cholecystectomy, open cholecystectomy

Introduction

Gallstone disease is a global health problem. Most patients are asymptomatic, and gallstones are generally detected by ultrasonography during the evaluation of unrelated medical conditions⁽¹⁾. Cholelithiasis affects approximately 10% of the adult population in the United States and every year, approximately 500,000 cholecystectomies are performed⁽²⁾. It has been well demonstrated that the incidence of gall stones increases with age, an estimated 20% of adults over 40 years of age and 30% of those over the age of 70 years have biliary calculi. During the reproductive years, the female-to-male ratio is about 4:1, with the sex

discrepancy narrowing in the older population to near equality. The risk factors predisposing to gallstone formation include obesity, diabetes mellitus, estrogen and pregnancy, hemolytic diseases, and cirrhosis⁽²⁾.

Over the past two decades, laparoscopic cholecystectomy (LC) has become the gold standard for the surgical treatment of gallbladder disease. A shorter hospital stay (and, thus, a more rapid return to normal activity and work), less postoperative pain, a faster recovery, better cosmesis, and lower cost are some of the advantages of LC over open surgery⁽³⁾. The potential for conversion from a laparoscopic to an open procedure has been reported in the literatures with a high degree of variability,