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IS MALE GENDER A RISK FACTOR FOR CHOLECYSTECTOMY?

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ABSTRACT:

AIMS & OBJECTIVES: *To determine the effect of male gender on clinical presentation of symptomatic cholelithiasis, acute cholecystitis, operating time, frequency of conversion and postoperative length of stay in the hospital.*
STUDY DESIGN: *Retrospective comparative study*
SAMPLE SIZE: *615*
METHODS: *Records of all 615 cases of symptomatic cholelithiasis, which underwent for surgery between the years Jan 2006 and Jan 2009 in surgical unit I, Civil Hospital, Karachi were included having records of their severity of disease, operating time and conversion rate.*
RESULTS: *Out of 615 cases, females were 502 (81.62) and males were 113 (18.37%). Independent variables measured included acute cholecystitis 27/113 (23.89%) in males and 57/502(11.35%) in females, acute suppurative cholecystitis (empyema) 13/113 (8.7%) in males, and 15/502 (3.4%) in females, pancreatitis 07/113(6.19%) in males, and 08/ 502 (1.59%) in females. Out of 615 patients, 43 (6.99%) patients were managed conservatively. The rest of 572 patients (93.00%) underwent surgery. Mean duration of Operative time (in minutes) of the group of patients which had open & laparoscopic cholecystectomy was significantly higher in males as compared to females. (P<0.05). Conversion rate of laparoscopic to open cholecystectomy was 8/31 (25.88%) in males, whereas it was 10/140 (07.14%) in females (P<0.05)*
CONCLUSION: *Male gender is a high risk factor in comparison to female gender resulting in difficult surgery, a longer duration of procedure, increased rate of conversion from laparoscopic to open surgery and length of postoperative hospitalization.*

KEY WORDS: Cholecystectomy, Cholelithaisis, Laparoscopic, Male gender

INTRODUCTION:

Gallstone disease is prevalent worldwide though its prevalence varies by region. In western countries it ranges from approximately 8% in men to 16.6% in women, whereas in Asian countries it is 3% to 15 %, and in African countries it is less than 5%. The women develop gallstone disease more than men which may largely be due to extraneous risk factors, such as pregnancy and sex hormones.[1]

Acute cholecystitis is the most frequent complication occurring in patients with cholelithiasis. Other serious complications include acute suppurative cholecystitis (empyema), acute cholangitis, obstructive jaundice, and pancreatitis.[2]

Cholecystectomy is the treatment of choice for symptomatic gallstones. It comprises of open and laparoscopic approaches. Laparoscopic cholecystectomy has rapidly become the preferred technique since early 1990's, and the traditional open cholecystectomy has been replaced by laparoscopic cholecystectomy which is now the gold standard.[3]

Recently male gender has been recognized as risk factor in some developed countries for predicting a more severe disease , with more technical difficulties at the time of surgery, increased morbidity in those with symptomatic cholelithiasis and also for an increased conversion rate of laparoscopic cholecystectomy.[4,5,6,7] Compared with female gender, males are most likely to have severe disease at presentation, previous hospitalization for acute cholecystitis, suppurative cholecystitis pancreatitis and longer operative time[6,7,8]

Main reason for conversion has been the inability to safely display and identify anatomical structures of calot's triangle correctly secondary to severe inflammation or dense adhesions, precluding the safe performance of laparoscopic cholecystectomy.[8, 9, 10]

The associated factors of symptomatic cholelithiasis are, history of acute cholecystitis, thickened Gallbladder wall on ultrasound, male gender and elevated total white cell