

# **Factors predicting the operative difficulty in Laparoscopic cholecystectomy: An observational study.**

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## ***Abstract***

Background: Laparoscopic cholecystectomy is minimally invasive surgery done for removal of diseased gall bladder and considered as gold standard. It is the commonest general surgical procedures done worldwide. Methodology: An observational study done in Hind Institute of medical Sciences, Barabanki. from June 2017 to June 2021 during which patients admitted with the plan of laparoscopic cholecystectomy were preoperatively evaluated clinically, biochemically and radiologically. LC was performed by standard 4 port technique was under GA by qualified surgeon and well-trained team. Surgery was categorised into easy, difficult and very difficult depending on the duration of surgery. Preoperative factors were then analysed and compared with the operative difficulty. Result: A total of 300 patient underwent LC in which 71.7% were females. Mean age of patients was  $41.36 \pm 13.68$  years with 31.3% patients between 41-49 years. Recurrent abdominal pain was observed in 38.3% and 4.3% patient had history of biliary pancreatitis. Ultrasonologically, single stone was observed in 62% whereas thickened GB wall was observed in 33%. Serum ALP was elevated in 2.3 % whereas 2.7% had leucocytosis. Operative ease was encountered in 40% consuming < 60 minutes, whereas 56.7% was difficult (60-120 mins) and 3.3 % were very difficult (>120 mins). Conversion rate was 1.65%, all from very difficult category. Age 40-49 years, solitary GB calculus, GB wall thickness > 4mm, leucocytosis and history of pancreatitis has statistically significant correlation with difficult cholecystectomy but no such association was observed with gender, elevated serum ALP and comorbidities. Conclusion: Difficult LC was observed in 60% patients. Age between 41-50 years, solitary GB calculus and thickened GB wall (>4mm) with a attack of pancreatitis can be considered as predictor for difficult cholecystectomy.

## **Keywords:**

Gall stone disease Cholelithiasis Cholecystitis Laparoscopic Cholecystectomy Difficult cholecystectomy ultrasonography