**Original article:**

**Comparison of liver function test in patients undergoing cholecystectomy (Open And Laparoscopic): A retrospective study.**

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**Abstract:**

**Background:** Laparoscopic cholecystectomy is considered as the treatment of choice for gallstones and inflammatory gallbladder. It is always considered as better than classical open one due to various advantages.Pneumo-peritoneum is created in abdominal cavity with the help of insufflating inert gas like CO2 which is most essential step for laparoscopic cholecystectomy. Due to this pneumo-peritoneum several physiological changes in the patients have been reported especially in liver function**.**

 **Methods:** All patients were divided into two groups consisting of Group I (155 patients) referred for laparoscopic cholecystectomy and Group II (45 patients) posted for open cholecystectomy.We observed serum levels of liver enzymes (SGOT, SGPT, ALP, GGT and LDH) in both the groups. The liver enzymes were noted both preoperatively, one day and 21 days post-operatively.All the parametric data was analysed using Student’s t-test and non-parametric data using Chi-Square/Fisher test.

**Results:** The significant alteration in AST, ALT & GGT was observed after laparoscopic surgery but values returned to normal after three weeks. Conclusion: Patients suffering with liver disease with significantly disturbed liver function tests before surgery, open cholecystectomy can be preferred treatment.

**Keywords**: Cholecystectomy, Laparoscopy, Impaired liver functions, Pneumo-peritoneum.