A COMPARATIVE ANALYSIS OF LAPAROSCOPIC APPENDECTOMY IN RELATION TO OPEN APPENDECTOMY

BY

Ahmed Mohammed Ahmed Ali
M.B.B.CH

Supervised by

Prof. Dr. YASSER HATATA
Prof. of General Surgery
Faculty of medicine, Fayoum University

Dr. GHADA MORSHED
Assist. Prof. of General Surgery
Faculty of medicine, Fayoum University

Dr. KHALED DIAB
Lecturer of General Surgery
Faculty of medicine, Fayoum University

FAYOUM UNIVERSITY
2018

A COMPARATIVE ANALYSIS OF LAPAROSCOPIC APPENDECTOMY IN RELATION TO OPEN APPENDECTOMY

By

Ahmed Mohammed Ahmed Ali

A Thesis Submitted for partial fulfillment

Of

The requirements for

Master of Science degree

In

General Surgery

Department of general surgery
Faculty of medicine, Fayoum

FAYOUM UNIVERSITY
2018

English Summary

Background

Acute appendicitis is the most common abdominal surgical emergency. Appendectomy is the most frequent emergency operationthat can be done effectively by open or lapaparoscopic methods**.**

Aims

Is to compare between the two surgical techniques;Laparoscopic Appendectomy and open appendectomy as regards the length of hospital stay, operative time, need for postoperative pain managementand antibiotic therapy, initiation of postoperative oral fluid and solid intake, complications during surgery and after surgery, re-hospitalizations, and reoperations.

Methods

This study was a Randomized prospective study included 30 patients admitted to emergency department of FUH were diagnosed as acute appendicitis. The 30 patients were divided into 2 groups; Group Aincluded 15 patientsunderwent open appendectomy performed through traditional oblique, right lower quadrant, muscle splitting incision centered over McBurney's point& Group B included 15 patients underwentlaparoscopic appendectomy was approached by a three trocar technique; supra or infra-umbilical 10-mm Hasson, left lower quadrant 10-mm&suprapubic 5-mm trocars.Large sized titanium clips were used to secure the appendicular base.***The operative time*** was calculated from the skin incision to the skin closure, ***Intraoperative***(as Bleeding and injuries of hollow organs) ***and postoperative complications***(wound infection and intraabdominal abscess) were documented if present. Time for initiation of oral fluid and solid intake,***the length of postoperative hospital stay*** in hours. ***Need for post-operative Analgesia***(Number of parenteral and oral doses of NSAID was documented)and**antibiotics**(given only to patients complicated by wound infection according to the result of culture and sensitivity). ***Readmission and Reoperation*** were documented if present.

Results

Thirty patients (11 males, 19 females) were included in the study.The operative time was 37.6± 6.3minutesin Group A and 49.1 ± 7.5 minutesin GroupB.postoperative initiation of oral fluid and solid intakewas significantly earlier (p value is 0.043 and 0.037 respectively)in Group A when compared to Group B.PostoperativeHospital stay was 31.9± 6.7hours in Group A and 25.7 ± 9.1hours in Group B. None of the patients in Group B,while 3 patients (20.0%)in Group A developed woundinfection.number of doses of intravenous and oral analgesics needed postoperative was significantly less (p values are 0.001and 0.0001 respectively)in Group A when compared to Group B.

Conclusion

LA was superior to OA as regards the shorter hospital stay, earlier postoperative initiation of oral intake, less need for postoperative analgesics and antibiotics and less postoperative complications.Besides, laparoscopy preserves the option of leaving a macroscopically normal appendix and has its diagnostic value of detection of the cause of acute abdomen in case of a macroscopically normal appendix. Finally, LA provides a safer trainingmodel for young residents to improve their laparoscopic skills than laparoscopic cholecystectomy.