076

LAPAROSCOPIC VERSUS OPEN APPENDECTOMY IN CHILDREN: A RANDOMIZED CONTROLLED TRIAL

Jamshed Akhtar, Roshan Ali, Muhammad Anwar
National Institute of Child Health Jinnah Sindh Medical University, Karachi, Pakistan

Aim of the Study: To compare the outcome in terms of mean duration of surgery, mean length of hospital stay, and wound infection rate following laparoscopic versus open appendectomy in patients with acute appendicitis.

Methods: This was randomized controlled trial conducted after approval from approval from IRB. The estimated sample size was 63 in each group. Patients were divided in two equal groups Group A: Laparoscopic appendectomy and Group B: Open appendectomy. Age and sex of patients, signs and symptoms and their duration were noted. Intraoperative findings were recorded. Duration of surgery, duration of hospital stay and post operative wound infection was documented. The results were analyzed using Student t test for quantitative variables and Chi square test for qualitative variables.

Main Results: Mean age of study subjects was 9.68±2.12 years in laparoscopic appendectomy group and 9.84±2.35 year in open appendectomy group. In laparoscopic appendectomy group, inflamed appendix was found in 68.3% patients, perforated in 17.5%, gangrenous in 9.5%, and suppurative in 4.8% patients. In open appendectomy group, inflamed appendix was found in 60.3% patients, perforated in 22.2%, gangrenous in 4.8%, and suppurative in 12.7%.

The mean duration of operation was 55.56±24.38 min in laparoscopic group and 39.44±8.08 min in open appendectomy group. The p=0.000 was significant in favor of open appendectomy group. The mean duration of hospital stay was 34.16±13.32 hours in laparoscopic group and 39.84±11.55 hours in open appendectomy group (p=0.012 NS). The results showed no significant association of wound infection between the two groups (p=0.309 NS).

Conclusion: There was no difference in terms of hospital stay and rate of wound infection amongst the groups however laparoscopic procedure was technically demanding. With learning curve this can be improved.