

## A CLINICAL STUDY ON REASONS FOR CONVERSION OF LAPAROSCOPIC TO OPEN APPENDICTOMY IN GGH, KADAPA

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### INTRODUCTION

Appendicitis is an inflammation of the appendix, a finger-shaped pouch that projects from colon on the lower right side of abdomen. The Appendix does not have a specific purpose. Appendicitis causes pain in lower right abdomen. However, in most people, Pain begins around the navel and the moves .As inflammation worsens, appendicitis pain typically increases and eventually becomes severe. Although anyone can develop appendicitis, most often it occurs in people between the ages of 10 and 30. Standard treatment is surgical removal of appendix.

**Open Appendectomy:** Open appendectomy is the traditional method and the standard treatment for appendicitis. The surgeon makes an incision in the lower right abdomen, pulls the appendix through the incision, ties it off at its base, and removes it. Care is taken to avoid spilling purulent material (pus) from the appendix while it is being removed. The incision is then sutured. If the appendix has perforated (ruptured), the surgeon cleans the pus out of the abdomen with a warm saline solution to reduce the risk for infection. A drain may be inserted through the incision to allow the pus to drain from the abdomen. In this case, the skin is not sutured, but left open and packed with sterile gauze. The gauze and drain remain in place until the pus is completely drained and there is no sign of infection. If the abdomen is so inflamed that the surgeon cannot see the appendix, the infection is drained and treated with antibiotics, and then the appendix is removed. Laparoscopic appendectomy[2] In most laparoscopic appendectomies, surgeons operate through 3 small incisions (each ¼ to ½ inch) while watching an enlarged image of the patient's internal organs on a television monitor. In some cases, one of the small openings may be lengthened to complete the procedure. Advantages of laparoscopic appendectomy is Less post operative pain, short hospital stay, Quicker return to normal activity, Better cosmetic results.

Reasons for conversion of Laparoscopic to open appendectomy: If intra operative complications that cannot be handled with laparoscopy arise during laparoscopic appendectomy, conversion to an open appendectomy is indicated. It is crucial to understand the circumstances in which such conversion is warranted.

**Relative indications for conversion include[3]** Dense adhesions due to inflammation or prior surgical procedures, Perforated or gangrenous appendicitis, Gangrenous or necrotic base,

Generalized peritonitis, Retrocecal appendix, Inability to visualize the appendix, Uncontrolled bleeding, Tumour of the appendix extending into base, Other pathology, including malrotation, carcinoma, diverticula of cecum, endometriosis, pelvic inflammatory diseases, torsion of tubo-ovarian cyst

## MATERIALS AND METHODS

The study subjects were patients, admitted with diagnosis of Appendicitis, who subsequently underwent appendectomy at Department of General Surgery, GGH, Kadapa, AP .In study period of 5 years between Jan 2019 and Dec 2023.All the patients were interviewed for detailed clinical history and examined. They were then subjected to routine blood, urine and other investigations as per protocol and an abdominal ultrasound were performed in all cases.

**Inclusion criteria:** Patients have appendicitis confirmed by ultrasound scan, X-ray, CT scan. Patients were included from 0 to 65 years suffering with appendicitis.

**Exclusion criteria:** Excluding patients, pregnant women, patients unfit for GA/laparoscopy. Patients not willing to participate in our study.

## METHODOLOGY

This is a prospective descriptive analytical single centre research study. In this study all the cases of Appendicitis admitted in surgery department undergoing appendectomy were studied, diagnosed and treated with surgical management (Laparoscopic or Open)during the period of 5 years and 220 cases were studied .A thorough record of patients data was performed ,including the history and clinical examination, laboratory investigations, ultrasound abdomen, x-ray chest and other imaging study , operative details, histopathology report, postoperative course. The variables noted and analyzed included: the demographic data, presenting complaint, previous history of jaundice or abdominal surgery, associated medical disease, abdominal tenderness, WBC count, LFTs, abdominal ultrasound, operative details, complications (preoperative or postoperative), histopathology report, postoperative course and follow-ups.

## RESULTS AND DISCUSSION

**TABLE NO 1: GENDER WISE DISTRIBUTION**

GENDER	2019	2020	2021	2022	2023
MALE	21	23	31	29	24
FEMALE	17	19	16	23	17

**TABLE NO 2: AGE WISE DISTRIBUTION**

AGE GROUP	2019	2020	2021	2022	2023
BELOW 15	6	9	7	5	8
16-25	12	17	15	12	18
26-35	8	12	9	8	10
36-45	6	8	7	9	8
46-55	2	5	4	3	3
56-65	2	3	0	3	1
TOTAL	36	54	42	40	48

**TABLE NO 3: DISTRIBUTION BASED ON NUMBER AND TYPE OF SURGERIES**

TYPES OF SURGERY	2019	2020	2021	2022	2023
LAP APPENDICECTOMY	23	27	33	28	19
OPEN APPENDICECTOMY	9	14	12	17	10
COVERSION OF LAP TO OPEN	3	6	8	5	6

**TABLE NO 4: DISTRIBUTION BASED ON NUMBER AND TYPE OF SURGERIES**

TYPES OF SURGERY	NUMBER OF SURGERIES DONE	PERCENTAGE
LAP APPENDICECTOMY	130	59.09
OPEN APPENDICECTOMY	62	28.18
COVERSION OF LAP TO OPEN	28	12.7

**TABLE NO 5: REASONS FOR CONVERSION OF LAP TO OPEN**

REASONS FOR CONVESRION	NUMBER OF CASES	PERCENTAGE
DENSE ADHESIONS	13	46.42
PERITONITIS	7	25
UNCONTROLLED BLEED	4	14.28
NOT VISUALIZATION OF APPENDIX	3	10.71
RETROCECAL APPENDIX	1	3.5

**CONCLUSION**

Laparoscopic Appendectomy has emerged as the gold standard in the treatment of appendicitis. Though it is easier to teach and learn the laparoscopic surgery with the help of magnified visual display, specialized training is a must in case of the laparoscopic technique. In our study males are more prone to appendicitis than females. LA has less pain after surgery, and

has a shorter hospital stay and a shorter recovery time so it is preferred over OA. The overall frequency of conversion of LA to OA was 12.7%; the reasons for conversion were Dense adhesions due to inflammation and Generalized peritonitis, Uncontrolled bleeding during the surgery.

From our study the occurrence of Appendicitis were observed in various age groups and observed that the high incidence in the age group of 0-25 years.

## **REFERENCES**

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