

# ROLE OF LAPAROSCOPY IN THE MANAGEMENT OF LOWER ABDOMINAL PAIN IN GASTROINTESTINAL SURGERY UNIT AT ALEXANDRIA MAIN UNIVERSITY HOSPITAL

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## Introduction

The introduction of laparoscopic surgery and recent in laparoscopy have been increasingly recognized as a procedure that offers precise visual assessment of intra-abdominal condition for diagnosis and prompt intervention. Laparoscopy has a significant diagnostic and and therapeutic role in patient with abdominal pain. In case of diagnostic uncertainty, laparoscopy may help to avoid unnecessary laparotomies, provide accurate diagnosis and helps to plan surgical treatment. The main function of laparoscopic evaluation is to detect the presence or absence of intra-abdominal organic lesion.

Acute lower abdominal pain causes can be grouped under a spectrum of surgical gynecological, renal and other conditions ranging from trivial to life threatening therefore requiring early and accurate surgical intervention to avoid further health risks and death.

Globally it is reported that abdominal pain is the most common complaint in people who visit the emergence department for intervention accounting for about 7-10% of all Emergence department visit.

Different strategies have been used to asses these patients including careful history taking, proper physical examination, imaging methods and Laparoscopy. The main goal of diagnostic and interventional laparoscopy is to fasten treatment time, improve treatment outcomes, avoid the possibility of unnecessary laparotomies and decreasing post-operative morbidity.

## Aim of the work

The aim of this study is to evaluate and establish role of diagnostic and therapeutic laparoscopy in the management of lower abdominal pain in the era of therapeutic laparoscopy in Gastrointestinal surgery unit at Alexandria Main University Hospital.

## Subjects

This study included 50 patients who were retrospectively reviewed for lower abdominal pain associated with different lower acute abdominal pathologies presented at Alexandria University Hospitals from December 2019 to December 2020.

## Methods

A descriptive analysis of data were collected from medical records of these patients who underwent diagnostic as well as therapeutic laparoscopy to study the varied clinical picture, laboratory reports, radiological findings, laparoscopic findings, operative findings, intervention and outcome. The usefulness of laparoscopy to confirm the diagnosis and in clinical

## Results

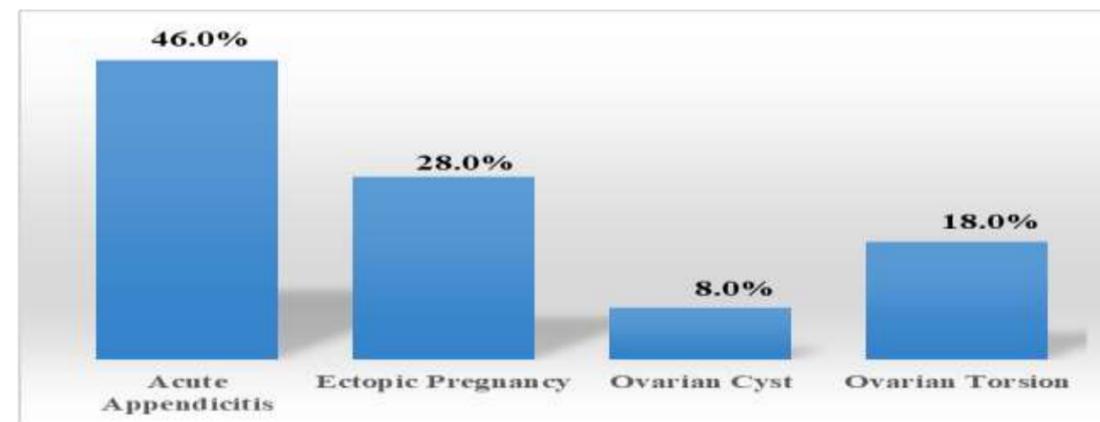


Fig 1: Common cause of surgical lower abdominal pain

It was observed in our study that most of the patients with lower abdominal pain were diagnosed with acute appendicitis 23(46.0%). The second most common cause of the lower abdominal pain was ectopic pregnancy 14(28%) patients, this was followed by ovarian torsion 9(18.0%) and lastly ovarian cyst 4(8.0%). Diagnostic laparoscopic approach was done and therapeutic interventions were carried out based on the findings obtained on diagnostic laparoscopy to achieve a desirable cure. Various therapeutic interventions that were carried out to achieve cure included Appendicectomy (44%), salpingectomy (14.0%), Detorsion (9.0%) and cystectomy (5.0%). Thus, in overall 100% patients, therapeutic interventions were carried out in our study.(Table 1)

Table (1): Findings at laparoscopic evaluation and treatment adopted

Findings	Number (n)	Frequency (%)
Final Diagnosis by laparoscopy approach		
Acute Appendicitis	23	46.0
Ectopic Pregnancy	14	28.0
Ovarian Cyst	4	8.0
Ovarian Torsion	9	18.0
Treatment by Laparoscopic intervention		
Appendectomy	22	44.0
Salpingectomy	14	28.0
Detorsion	9	18.0
Cystectomy	5	10.0

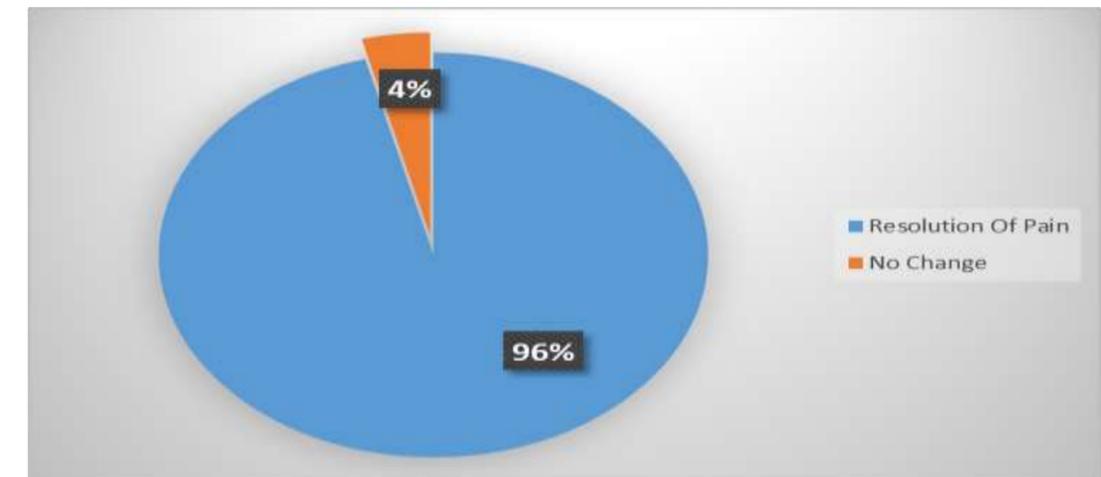


Figure (2): Outcome of laparoscopic intervention on lower abdominal pain

It was shown that of all patients who were operated, almost all had resolution of pain, only 2(4.0%) showed no change in pain after treatment.

## Conclusions

Laparoscopic surgical approach is reproducible, feasible and safe for management of lower abdominal pain in both surgery and obstetric/gynecology department. Laparoscopic surgical approach has the advantage of producing less postoperative pain, shorter duration of postoperative ileus, earlier postoperative recovery and shorter hospital stay.