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TO FIND OUT THE THERAPEUTIC ROLE OF DIAGNOSTIC LAPAROSCOPY IN CHRONIC ABDOMINAL PAIN AND COMPARING ITS EFFECTIVENESS WITH OPEN PROCEDURES.

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Abstract

Background & Method: All the patients with chronic pain abdomen admitted in general surgery under the Department of surgery Index Medical College and Hospital, Indore. The patient is placed on the operating table with the legs straight or lithotomy position if female. The operating table is tilted head up or down by approximately 15 degree depends on the main area of examination. Compression bandage may be used on leg during the operation to prevent thromboembolism especially if patient is in lithotomy position.

Result: Laparoscopy has been proved diagnostic as well as therapeutic in 82% of the cases enrolled in our study.

Conclusion: Laparoscopy (diagnostic and therapeutic) is simple, safe, available and diagnostically accurate procedure but it is not non-invasive, non traumatic, nor the first choice for diagnosis. It should be reserved for those situations after non invasive methods fail to make a diagnosis.

Keywords: laparoscopy, therapeutic, abdominal & diagnostic.

Introduction

History of present illness should elicit pain location, quality, duration, timing and frequency of recurrence, and factors that worsen or relieve pain (particularly eating or moving bowels)[1]. A specific inquiry as to whether milk and milk products cause abdominal cramps, bloating, or distension is needed, because lactose intolerance is common, especially among blacks[2].

Review of systems seeks concomitant GI symptoms such as gastroesophageal reflux, anorexia, bloating or "gas," nausea, vomiting, jaundice, melena, hematuria, hematemesis, weight loss, and mucus or blood in the stool. Bowel symptoms, such as diarrhea, constipation, and changes in stool consistency, color, or elimination pattern, are particularly important[3].

In adolescents, a diet history is important because ingestion of large amounts of cola beverages and fruit juices (which may contain significant quantities of fructose and sorbitol) can account for otherwise puzzling abdominal pain[4].

Past medical history should include nature and timing of any abdominal surgery and the results of previous tests that have been done and treatments that have been tried[5]. A drug history should include details concerning prescription and illicit drug use as well as alcohol**.**

Material & Method

All the patients with chronic pain abdomen admitted in general surgery under the Department of surgery Index Medical College and Hospital, Indore from August 2019 to July 2020 will be carried out in this study. To perform a basic diagnostic laparoscopy one must have equipment to create a Pneumoperitoneum, Light source, video, a cable and telescope, and instruments to manipulate the viscera.

1) Selection of patients

- Patients presenting with pain abdomen more than 3 months in general surgery in M.Y. Hospital, Indore.
- Patients with age more than 12 years.
- Total of 34 patients from Sept. 2007 to Sept. 2010.

2) Exclusion Criteria

- Patient below 12 years.
- Patients with serious medical problems like HT, DM, CHD.
- Patients with head injuries and psychotic disorders with history of alcohol injections.

PROCEDURE

The patient is placed on the operating table with the legs straight or lithotomy position if female. The operating table is tilted head up or down by approximately 15 degree depends on the main area of examination. Compression bandage may be used on leg during the operation to prevent thromboembolism especially if patient is in lithotomy position. The surgeon stands on left side of the patient. The first assistant, whose main task is to position the video camera, is also on the patient's left side. The instrument trolley is placed on the patient's left allowing the scrub nurse to assist with placing the appropriate instruments in the operating ports. Television monitors are positioned on either side of the top end of the operating table at a suitable height so surgeon, anesthetists, as well as assistant can see the procedure.

Results

Table 1: Diagnosis

Diagnosis	No. of Cases	%
Acute on chronic Appendicitis or recurrent Appendicitis	12	35
P/O Adhesion	5	15
Intestinal Band	1	3
Koch's Abdomen	9	26
PID	1	3
Endometriosis	1	3
Non specific mesentric adenitis	1	3
Ovarian Cyst with torsion	1	3
No Abnormality Detected	3	9
Total	34	100

Table 2: Laparoscopy changed the diagnosis

Laparoscopy	No. of Cases	%
Altered the diagnosis	3	9
NAD	3	9
Proved Diagnostic or therapeutic or both	28	82
Total	34	100

Laparoscopy has been proved diagnostic as well as therapeutic in 82% of the cases enrolled in our study.

Table 3: Laparoscopic procedure in CAP

Laparoscopy	No. of Cases	%
Diagnostic & Therapeutic	28	82
Therapeutic	23	68
Diagnostic	10	29

Discussion

In 1901 German surgeon George Kelling in Berlin performed the first experimental laparoscopy who used a cytoscope to peer into the abdomen of a dog after first insufflating it with air. He also used filtered atmosphere air to create a pneumoperitonium with the goal of stopping intra-abdominal bleeding but these studies did not find any response or supporters. Since then numerous advances and developments have taken in face of minimally invasive surgery[6].

One patient with CAP 4 years, Mantoux negative, Pain in umbilical region, no vomiting, no distress, Laparoscopic diagnosis– Inflamed appendix pelvic position. Laparoscopic appendectomy was done[7]. Patient was cured.

Patients presented to us with CAP with Koch's abdomen diagnosed on DL were 9(26%) Case # 10, 38 year male presented to us with CAP 2 years, lean thin, vomiting off & on weight loss and anorexia present. Mountoux was negative DL was performed. Multiple nodular lesions gut and peritonium were fond. Biopsy taken from mesentric lymph node. It came out positive for Koch's. Patient started ATT and was followed for 9 months. There was improvement in pain and weight gain[8].

Laparoscopy turned out to be diagnostic and therapeutic in 82% of cases enrolled in our study. Unnecessary laparotomy have been avoided in 29(86%) cases. Thus DL has brought definitive change in patient management by obviating need of laparotomy[9].

Out of 3 patients with negative diagnostic laparoscopy 2 cases had no change in pain after 1 and 6 months follow-up. 1 out of 3 cases reported pain relief at 1 and 6 months. This accounts for the placebo role of DL in cases of CAP.

Long term pain relief was noticed in 91% of cases enrolled in our study. No change in pain at 1 and 6 months duration in 6% cases was reported. Initial pain relief followed by recurrence of pain was noticed in 3% of cases[10].

Conclusion

Laparoscopy (diagnostic and therapeutic) is simple, safe, available and diagnostically accurate procedure but it is not non-invasive, non traumatic, nor the first choice for diagnosis. It should be reserved for those situations after non invasive methods fail to make a diagnosis.

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