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STUDY TO EVALUATE THE ROLE OF LAPAROSCOPY IN CHRONIC ABDOMINAL PAIN

General Surgery

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ABSTRACT

INTRODUCTION : Chronic abdominal pain can be diagnostic challenge. Chronic abdominal pain is a significant clinical problem that often leads to repeated laparotomies. Laparoscopy has a significant diagnostic and therapeutic role in patients with chronic abdominal pain. In case of diagnostic uncertainty, laparoscopy may help to avoid unnecessary laparotomy, 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.

AIMS AND OBJECTIVES : To determine the diagnostic and therapeutic role of laparoscopy in chronic abdominal pain.

MATERIALS AND METHODS : All patients undergoing laparoscopy for chronic abdominal pain were included in the study for a period of 1 year from Nov. 2018 to Oct. 2019 in SHANTIRAM Medical College and General Hospital. The patient's demographic data, length of time with pain, diagnostic studies, intraoperative findings, interventions and follow-up were determined.

INCLUSION CRITERIA: Patients with history of abdominal pain for 3months or more, if physical examination and diagnostic tests are unrevealing. Patients with previous history of abdominal operation are included.

RESULTS : A total of 25 patients (19 women and 6 men) with an average age of 34.64yrs underwent diagnostic laparoscopy for the evaluation and treatment of chronic abdominal pain. The average length of time with pain was 32.96 weeks (range 12-96). 2 cases required conversion to an open procedure and no complications occurred. Findings included abdominal Koch's in 9, appendicitis in 8, cholecystitis in 1, cirrhosis in 1; ovarian cyst in 1, bilateral fimbrial cyst in 1 and 4 patients had no obvious pathology. 82.6% of patients had pain relief at the time of follow up.

CONCLUSION : Laparoscopy has a diagnostic and therapeutic role in patients with chronic pain abdomen.

KEYWORDS

Chronic abdominal pain, Diagnostic laparoscopy, Abdominal Koch's.

INTRODUCTION

Chronic abdominal pain can be diagnostic challenge. These difficult patientsare frequently seen by many different physician and are myriad of tests without identifying the etiology of pain. Surgical consultation often occurs late after other modalities have failed to provide resolution of their symptomatology. 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 is the only method of visualizing the pathologic anatomy ofabdominal cavity in clinical practice. Laparoscopy allows surgeons to see and treat many abdominal changes that could not be diagnosed otherwise. Hence diagnostic laparoscopy should be considered for patients suffering from chronic abdominal pain, as it is minimally invasive, safe, efficacious and effective diagnostic modality and can be performed rapidly, safelywith minimal sequel.

AIMS

To determine the diagnostic and therapeutic role of laparoscopy in chronic abdominal pain.

METHODOLOGY

This study included 25 patients presenting with history of abdominal pain for 3 or more months who were admitted in surgical wards between November 2018 October 2019.

Detailed history was recorded from patients and thorough clinical examination was performed. The findings were recorded in the proforma.

The recorded data included demographics, length of time; it had been presented, location of pain, patient's abdominal examination and diagnostic studies performed. Intraoperative findings and operative interventions undertaken were also identified.

HB%, TC, DC, ESR, Urine microscopy was the basic investigations done for all patients. RBS, BUN, and S.creatinine, chest x-ray, ECG and stool for ova, cyst and occult blood were done when indicated. Commonly performed imaging studies included plain abdominal radiographs, ultrasounds studies. Barium studies, upper gastrointestinal and lower gastrointestinal endoscopy were done when indicated. The surgical methods employed were as per etiology. All patients gave informed consent.

INCLUSION CRITERIA

Patients with history of abdominal pain for 3months or more, if physical examination and diagnostic tests are unrevealing. Patients with previous history of abdominal operation are included.

EXCLUSION CRITERIA

- Age under 18 years
- Oncological patients.
- Pregnant women.
- Patients with cogulation defects.
- Patients with critical illness.
- Medically unfit for surgery.

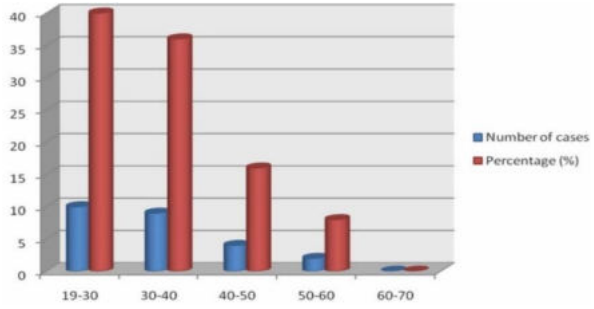
All surgeries were done under general anesthesia, all patients were catheterised and ryle`s tube were put. After pneumo peritoneum with veress needle at the rate of 5-6 L/min so that end point of intra abdominal pressure should not exceed 20-25 mmHg, 10mm umbilical trocar and two 5mm lateral trocars were put. The laparoscopy was started by a diagnostic inspection of liver, gallbladder, and anterior surface of stomach, large bowel, small bowel, appendix, gynecological organs and peritoneal surfaces. After laparoscopy, 5mm trocars were remove dunder visual control, the air was released from intra-abdominal space and 10mm trocar was removed. All 5mm wounds were closed in one layer with absorbable sutures and 10mm umbilical wound with non-absorbable suture.

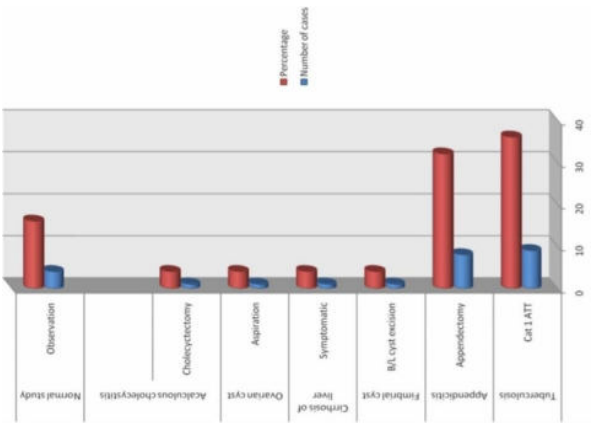
RESULTS

This study of 25cases of chronic abdominal pain showed peak incidence in 3rd decade. In our study youngest patient was 19yrs and oldest was 60yrs. The mean age of presentation was 34.64. This study of 25cases of chronic abdominal pain showed peak incidencein female (76%). The peak incidence of duration of pain was between 12 to 30 weeks. The average duration of pain was 32.96 weeks. Most of the patients presented with lower abdominal pain (52%), diffuse abdominal pain (40%) and eight percent with upper abdominal pain. From the above table it is evident that most common findings were abdominal tuberculosis (36%) which was found in 9cases. All patients proven with omental biopsy, then treated with CAT 1 anti-tubercular drugs. The second common cause was appendicitis which was found

in 8(32%) cases. At laparoscopy no abdominal and pelvic abnormality was noted except that appendix appeared abnormal.

GRAPH SHOWING AGE DISTRIBUTION





GRAPH SHOWING LAPROSCOPY FINDINGS AND TREATMENT ADOPTED

These abnormalities some were thickened and adherent to adjacent structure. Some curved and felt rigid. HPE s/o chronic appendicitis. One patient had B/L fimbrial cyst, laparoscopy was converted to open and Fimbrial cyst excision with right oophorectomy done. One patient had ovarian cyst, laparoscopy aspiration done. One patient had cirrhosis of liver, managed conservatively. One patient had thickened gall bladder wall, laparoscopic cholecystectomy done. In four patients no abnormality was found and kept on observation. In 21patients with chronic abdominal pain pathological findings on laparoscopy were present, giving a diagnostic accuracy of 84%. In 4 patients (16%) no abnormal findings were present.

DISCUSSION

Chronic abdominal pain is a common problem, dealt with by a variety of medical specialists. Even after an extensive work up in some patients, no pathological condition is found by non-invasive investigation and the pain is often attributed to unsubstantiated diagnosis. Diagnostic laparoscopy makes it possible for the surgeon to visualize surface anatomy of intra-abdominal organs with greater details better than any other imaging modality. Laparoscopy may be useful to establish a histological diagnosis of intra abdominal tuberculosis [1]. Deep parenchymal organs, process of the retroperitoneal space, and the inner surface of the hollow organs cannot always be noticed using laparoscopy.

Another limitation of laparoscopy is that it does not allow the surgeon to palpate organs.

COMPARISON OF DIAGNOSTIC EFFICECY OF LAPROSCOPY IN VARIOUS STUDIES

Study	Diagnosis (%)	No. of cases
Raymond P. et al[9]	85.7	70
Karl miller et al[5]	89.8	59
Present study	84	25

In our present study 25 patients were admitted in surgical wards with chronic abdominal pain. In our study 21(84%) patient had pathological findings identified at the time of laparoscopy. Karl miller et al[2] reported that laparoscopy provided diagnoses in 89.8% of patients. These results compare favorably with our series.

In our study, most common findings were abdominal tuberculosis. In study by prafull k.arya and gaur[3] most common findings was intestinal and peritoneal tuberculosis. This correlates with our study. Second common cause was appendicitis. Our study again correlates with prafull arya and gaur[3].

CONCLUSION

Chronic abdominal pain of unknown origin represents a significant problem in surgical patients. In some cases, even battery of investigation does not reveal the cause of pain. Due to improvement in instrumentation and greater experience in the laparoscopy, the procedure no longer limited to visualization. This study showed that laparoscopy is an effective approach in the management of patients with chronic abdominal pain.

Abdominal tuberculosis is common disease in India. Laparoscopy has a great deal to offer in early diagnosis of abdominal tuberculosis. Treatment with anti tubercular drugs provided pain relief. Other etiologies of pain like appendicitis, cholecystitis, ovarian cyst, cirrhosis of liver can be diagnosed and addressed. Advantages of diagnostic laparoscopy are that it is safe, efficacious and therapeutic procedure can be performed at same time.

Nevertheless, patient selection and appropriate operative technique are essential for rewarding outcome.

SUMMARY

This study was conducted in the surgical wards of SHANTIRAM Medical college and hospital, Nandyal from Nov 2018 to Oct 2019. To evaluate the efficacy of diagnostic and the rapeuticl laparoscopy in patients with chronic abdominal pain longer than 12 weeks. 25 patients in age group of 19 to 65 years were included in the study. Detailed history was taken and abdominal examination done. Radiography, sonography and endoscopic studies were done.

All 25 patients underwent laparoscopy. Physical and diagnostic tests did not yield accurate diagnosis in them. Mean age of presentation was 34.64yrs. Most of the patients were female (76%). Mean duration of pain was 32.96weeks. Majority of patients presented with lower abdominal pain (52%) followed by diffuse abdominal pain (40%). Historyof previous operation was present in 32% cases; all of them are with history of tubectomy and none of them had intra abdominal adhesion. Most common findingson laparoscopy was abdominal tuberculosis (36%), followed by appendicitis (32%), fimbrial cysts (4%), ovarian cyst (4%), cholecystitis (4%), cirrhosis of liver(4%) and 16% of patients had no pathological findings.

Efficacy of 82.6% patient had resolution of pain after laparoscopy. In patients with abdomen tuberculosis, 88.9% had resolution of pain after ATT. Patients in whom appendix was removed, 85.7% had resolution of pain. Overall 82.6% of patients with chronic abdominal pain had resolution of pain.

REFERENCES

1. Thomas A, Stellate MD: History of Laparoscopic Surgery. Surg Clin North Am: 1992; 72: 997-1002.
2. Karl Miller MD, Edith Mayer MD, Erich Moritz HD: The role of laparoscop in chronic & recurrent abdominal Pain. Am J. Surg: 1996:172; 353-7.
3. Arya PK and Gaur KJBS: Laparoscopy: A tool in diagnosis of lower abdominal pain. Indian J Surg: 2004; 66:216-20.