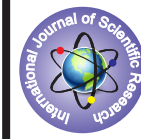


A study on effectiveness of diagnostic laparoscopy



Surgery

KEYWORDS: Chronic abdominal pain, Diagnostic laparoscopy, effectiveness

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ABSTRACT

Background: Diagnostic laparoscopy has got a considerable impact in managing patients with chronic abdominal pain, with efficacy of >80% in various studies. Chronic abdominal pain is intermittent or continuous pain lasting for more than twelve weeks. It is a significant clinical problem that is often a diagnostic challenge since a large number of patients presenting with chronic abdominal pain have no specific diagnosis at the end of their diagnostic workup. Diagnostic laparoscopy, which is a minimally invasive procedure could potentially be diagnostic and also therapeutic for chronic undiagnosed abdominal pain. Present study aimed to analyze the diagnostic and therapeutic value of laparoscopy in chronic, undiagnosed abdominal pain. **Materials and Methods:** In this study, 50 cases of chronic abdominal pain of 3 months or more duration with unremarkable clinical examination, basic investigations within normal limits, and unyielding imaging studies were taken with age group between 15-65 years. Study was done in surgery department of JLNMC, Bhagalpur, Bihar from October 2015 to September 2016. All cases were registered fulfilled the inclusion criteria and exclusion criteria. Results were analysed statistically. **Results:** In our study, diagnosis was possible in 34 numbers of cases which helps in proper investigation and management of the corresponding disease. **Conclusion:** This study establishes role of Diagnostic Laparoscopy as a safe and one of the most fruitful investigative tool in undiagnosed lower abdominal pain.

Introduction-

In surgical practice we frequently encounter patients with lower abdominal pain, who despite frequent routine examination and all major investigations remain undiagnosed and are often labelled as functional. Many of them undergo appendicectomy, some are put on anti-tubercular treatment specially in tropical countries, while females often end up taking anti-androgens. Thus the patient with lower abdominal pain continues to pose challenges to the diagnostic capability of the general surgeon. The most common organic conditions include intestinal adhesions, especially in patients with a past history of abdominal operations, abdominal tuberculosis, appendicular pathology, biliary causes, mesenteric lymphadenopathy (could also be due to infectious causes of bowel such as colitis, gastroenteritis or enteric fever apart from tuberculosis), and hernia; while functional conditions include irritable bowel disease, functional dyspepsia, and various motility disorders. Abdominal wall pain is also common and frequently mistaken for visceral pain. Despite investigations such as ultrasonography, computed tomography scan, etc., it is difficult to reach to an accurate diagnosis and represent a major diagnostic challenge to the surgeon. Diagnostic laparoscopy is minimally invasive surgery for the diagnosis of intra-abdominal diseases. This study aims at a critical examination of the available literature on the role of laparoscopy for the diagnosis and treatment of acute intra abdominal conditions. Diagnostic laparoscopy was first introduced in 1901, when the German surgeon George Kelling performed a peritoneoscopy in a dog, which was called "celioscopy". A Swedish internist named H.C. Jacobaeus is credited with performing the first diagnostic laparoscopy in humans in 1903. The diagnostic value of emergency laparoscopy has been proved since the 1950s and 1960s, but emergency diagnostic laparoscopy with surgical intervention is recent. It was first proposed by Philippe Mouton in 1990.

Materials and methods

In this study, 50 cases of chronic abdominal pain of 3 months or more duration with unremarkable clinical examination, basic investigations within normal limits, and unyielding imaging studies were taken with age group between 15-65 years. Study was done in surgery department of JLNMC, Bhagalpur, Bihar from October 2015 to September 2016. All cases were registered fulfilled the inclusion criteria and exclusion criteria. Laparoscopic procedure was performed under general anaesthesia. Each patient received single intravenous dose of ceftriaxone 1 gram as prophylaxis at the time of

induction. 10/5 mm scope was used through umbilical port. Second port (5/10 mm) was made in right upper abdomen. A third port (5 mm) was added if required in left lower quadrant. Whole of small bowel, ileo-caecal junction, appendix, large bowel, omentum and pelvic organs including uterus, both tubes and ovaries in females were routinely examined.

Results-

In our study, diagnosis was possible in 34 numbers of cases which helps in proper investigation and management of the corresponding disease. The efficacies of various studies reported in the literature in arriving at a diagnosis are >80% giving an indication that diagnostic laparoscopy has got a considerable impact on managing patients with chronic abdominal pain. In our study, also it was possible to achieve definitive diagnosis in 34 patients. The most common laparoscopic findings were adhesions. Other findings included pelvic inflammatory disease, abdominal tuberculosis, chronic appendicitis, mesenteric lymphadenitis and diverticulosis.

Discussion-

Chronic abdominal pain, defined as pain reported for a minimum period of 6 months and is affecting the daily life activities of the patients. Diagnosis and treatment of patients with CAP is usually difficult and frustrating. All patients included in the study had chronic abdominal pain, and they were subjected to laparoscopic evaluation after exclusion of all organic causes of the pain by radiographic and laboratory tests. The study confirmed that in this difficult patient group, laparoscopy could safely identify abnormal findings and can improve the outcome in a majority of cases. Malik et al, in their study on 133 patients undergoing diagnostic laparoscopy, found that 109 (82%) were diagnosed to have abdominal tuberculosis.⁵ The common symptoms in these patients included pain in abdomen, changing bowel habits, loss of weight, and generalized weakness. Rai et al, in their study had a majority of patients from the Indian subcontinent. 23 out of 25 patients that underwent diagnostic laparoscopy for suspected abdominal tuberculosis had this diagnosis confirmed.

Conclusion-

This study establishes role of Diagnostic Laparoscopy as a safe and one of the most fruitful investigative tool in undiagnosed lower abdominal pain.

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