



Advantages of Diagnostic Laparoscopy in Chronic Abdominal Conditions – A Retrospective Study

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Abstract

Diagnostic laparoscopy is defined as a minimally invasive surgical procedure that allows the visual examination and documentation of intra abdominal organs in order to detect any pathology. We studied 100 patients over a period of 3 years. 90% of our study patients were above 40 years. 43% of our patients had chronic abdominal pain, 27% of presented with subacute intestinal obstruction. 14% had surgical jaundice, 12% of patients had loss of appetite and weight, 4% of patients had occult hernias. Totally 100 diagnostic laparoscopies were done. Diagnostic laparoscopy alone established the diagnosis is 37%. Diagnostic laparoscopy and biopsy established the diagnosis in 98%. Diagnostic laparoscopy failed to yield the diagnosis n 2%. The sensitivity of this procedure is 98%. Its value is higher in malignant than inflammatory lesions because of extensive adhesions met in the latter condition. 27 patients who would ordinarily need explorative lapatomy had the same information gained by the use of diagnostic laparoscopy. 98% diagnostic conformation achieved in our series speaks for the advantage of laparoscopy as a diagnostic tool in chronic abdominal conditions. The P value <0.01. Though the invasive procedure, diagnostic laparoscopy is easy to perform and safe in expert hands.

Keywords: *Diagnostic laparoscopy, chronic abdominal pain, surgical jaundice, subacute intestinal obstruction.*

Introduction

Because of the morbidity associated with explorative laparotomy, we searched for advantageous in the use of elective diagnostic laparoscopy as a diagnostic tool in chronic abdominal disorders, in Kanyakumari Medical College Hospital, Tamil Nadu, India a tertiary care centre. Diagnostic laparoscopy is a minimally invasive surgical procedure that allow the visual examination and documentation of intra

abdominal organs in order to detect any pathology. Aims of this study is (1) To make a definitive diagnosis (2) To assess the extent of the disease. (3) To confirm the clinical and radiological findings in doubtful cases. (4) To give effective relief to the patients where possible. Diagnostic laparoscopy is defined as a minimally invasive procedure performed in patients who have equivocal diagnosis to arrive at a definitive diagnosis.

Materials & Methods

Design of Study

Time period of study - Jan.2016 to Jan.2018

Age of patients - 25 years to 65 years

Gender of patients - Male & Female

Place - Kanyakumari Government Medical College, Hospital

Inclusion Criteria

1. Chronic abdominal pain
2. Intra abdominal lymphadenopathy of unknown etiology
3. Surgical Jaundice
4. Ascites of unknown etiology
5. Vague abdominal mass
6. Subacute intestinal obstruction
7. Miscellaneous conditions

Exclusion Criteria

1. Mechanical or paralytic ileus
2. Coagulopathy
3. Severe cardiopulmonary disease
4. Abdominal wall infection
5. Pregnancy
6. Generalized peritonitis
7. Massive Ascites

All patients in the study are subjected to, History taking, Physical examination, Laboratory tests – CHG, LFT, Blood sugar, Renal function tests, Bleeding time, Clotting time, ECG, Radiology X-

ray chest, Contrast radiology if needed, Non invasive imaging USG, CT, Diagnostic laparoscopy, Follow up.

Procedure

Laparoscopic examination of peritoneal surface, diaphragm, liver, gall bladder, spleen, stomach, small intestine, colon, pelvic organs and retroperitoneal organs. Take biopsy of any mass & collect intraperitoneal fluid for cytology.

Abnormal Study Includes

1. Intra abdominal mass
2. Metastatic cancer
3. Fluid in peritoneal cavity
4. Adhesions
5. Endometriosis
6. Pelvic inflammatory disease
7. Occult hernia

Analysis of Data

Table – 1

S. NO	MODE OF PRESENTATION	NO OF CASES
1	Chronic abdominal pain	43
2	Sub Acute Intestinal Obstruction	27
3	Loss of Weight Loss of appetite	12
4	Occult Hernias	3
5	Facéal fistula	1
6	Jaundice	14

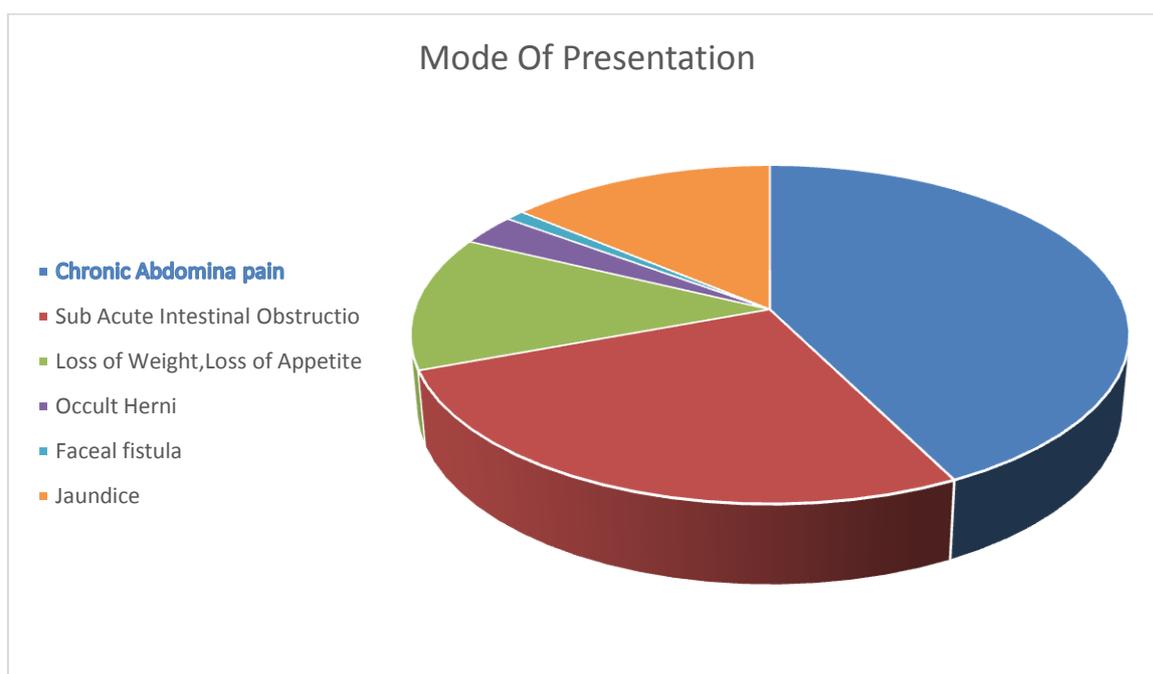


Table – 2

S. NO	CLINICAL ABDOMINAL FINDINGS	NO OF CASES
1	Tenderness	36
2	Mass Abdomen	16
3	Hard nodular Hepatomegaly	10
4	Ascites	4
5	Absent tests in Scrotum in normal position	3

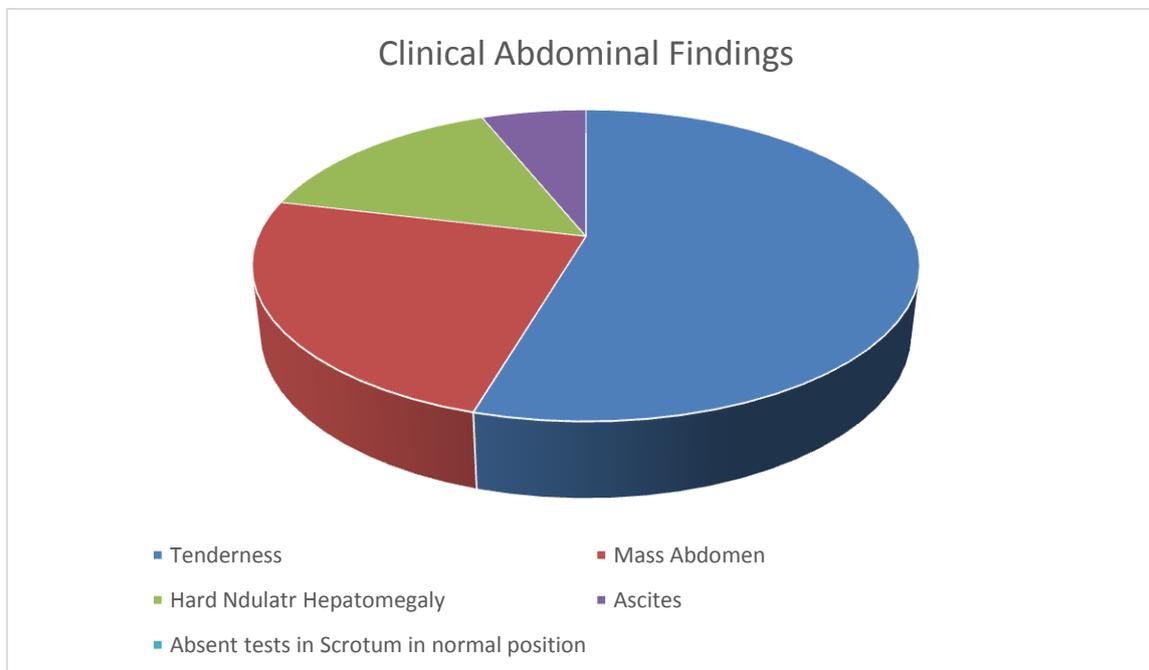


Table – 3

S. NO	EXTRA ABDOMINAL	NO OF CASES
1	Enlargement of Virchow’s node	2
2	Jaundice	14

Table – 4

S. NO	TYPES OF ANESTHESIA	NO OF CASES
1	General Anaesthesia	100

Table – 5

S. NO	LAPAROSCOPIC FINDINGS	NO OF CASES
1	Adhesions	25
2	Enlarged mesenteric nodes	19
3	Tubercles over mesentery, peritoneum	14
4	Nodules over liver	16
5	Intra abdominal testes	3
6	Secondary Deposits over	11
7	Malrotation of gut	1
8	Intussusception	2
9	Richter’s hernia	1
10	Absent Gall bladder	3
11	Mass in RIF (Complex)	1
12	Persistent Vitellointestinal band	2

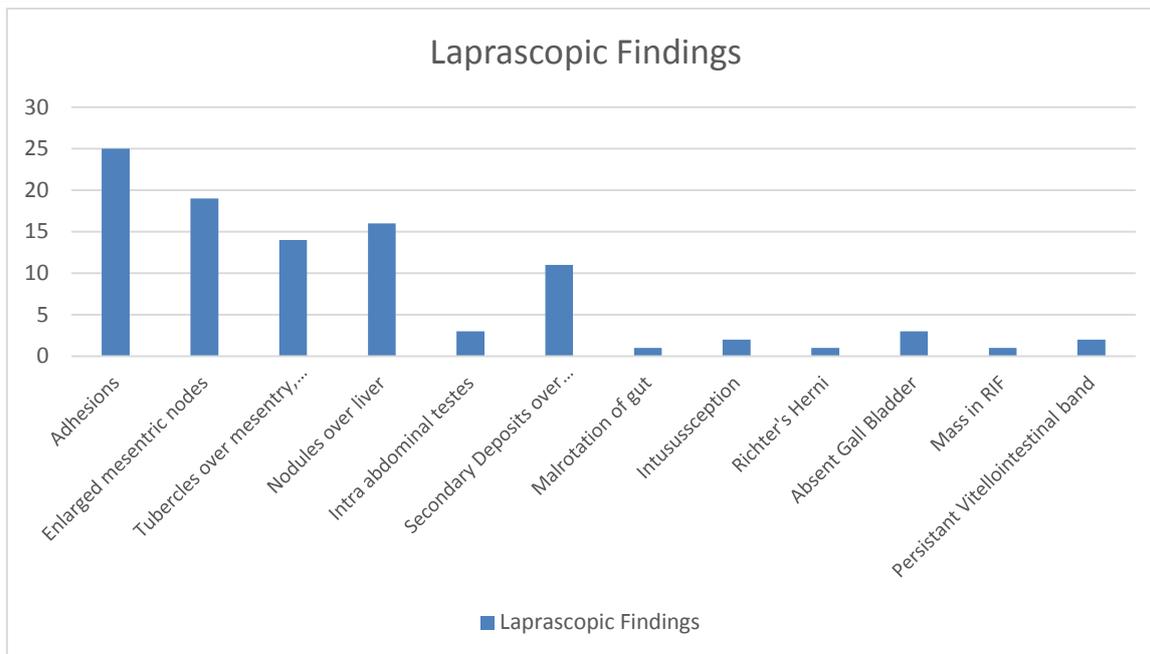


Table – 6

S. NO	NO OF BIOPSIES	NO OF CASES
1	Enlarged mesenteric / Paraaortic node / Tubercles	33
2	Nodules over liver	16
3	Mass in RIF (Complex)	1
4	Secondary Deposits over peritoneum	11
	TOTAL	61

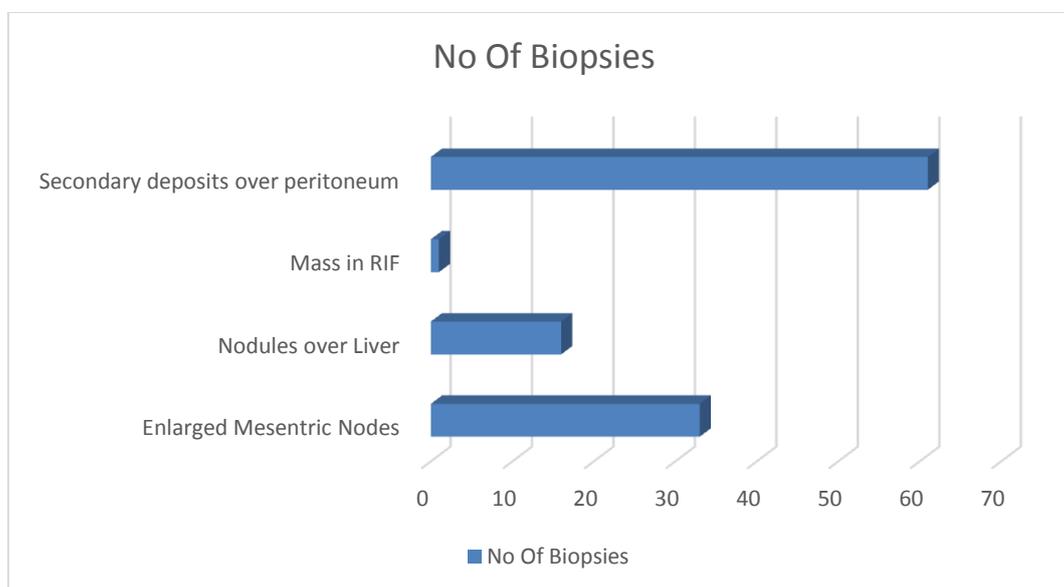


Table – 7

TOTAL NO OF CASES	TOTAL NO OF COMPLICATION
100	NIL

Discussion

In my study 43 patients presented with chronic abdominal pain. The diagnosis was established in

all but one patient. 27 patients presented with features of subacute intestinal obstruction. 25 of these patients had post operative adhesions as the

cause of the subacute intestinal obstruction. Two patient had persistent vitellointestinal band. One patients had partial malrotation of the gut. Another patient had intususception. Of the 12 patients who presented with loss of appetite and loss of weight 4 had TB abdomen. 8 patients had hepatocellular carcinoma. 16 patients presented with mass abdomen and 1 proved to be endometriosis and 10 patient had hyperplastic ileocaecal tuberculosis. Of the 10 patients who presented with nodular hepatomegaly 4 had hepatocellular carcinoma and 6 patient had cirrhosis of the liver. Jaundice was the indication for diagnostic laparoscopy in 14 patients and they proved to have hepatocellular carcinoma on liver biopsy. 4 patients had minimal ascities and fluid aspirated for cytology showed adenocarcinoma cells in one patient. Diagnostic laparoscopy showed nodular hepatic surface and biopsy proved the case as hepatocellular carcinoma. In 3 patients with absent testes in the normal scrotal position, diagnostic laparoscopy revealed intra abdominal testes. 3 patients presented with occult hernia and two were proved to be congenital hernias on diagnostic laparoscopy. One patient presented with faecal fistula and a Richter's hernia was seen on diagnostic laparoscopy. Diagnostic laparoscopy was performed in 100 patients and the objective diagnosis was established in 69 patients by Diagnostic laparoscopy alone. Biopsy along with Diagnostic laparoscopy established the diagnosis in 30 patients. The procedure did not provide a diagnosis in one patient. In three patients laparotomy was resorted to following Diagnostic laparoscopy. There were no complications observed.

Conclusion

Totally 100 diagnostic laparoscopies were done in my study. Diagnostic laparoscopy alone established the diagnosis in 37 patients Diagnostic laparoscopy + biopsy established the diagnosis in 61 patients. Diagnostic laparoscopy failed to yield a diagnosis in 2patient (2%). These figures

indicate the sensitivity (98%) of this procedure. Its value is higher in malignant than inflammatory lesions because of extensive adhesions met in the latter condition. In 10 patients who would ordinarily need exploratory laparotomy had the same information gained by the use of diagnostic laparoscopy. The fact that 98% diagnostic confirmation achieved in our series speaks for the advantage of laparoscopy as a diagnostic tool in chronic abdominal conditions. The P Value < 0.01 Though an invasive procedure Diagnostic laparoscopy is easy to perform and safe in expert hands.

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