



A Prospective Observational Study On The Utility Of Diagnostic Laparoscopy In Patients With Chronic Right Iliac Fossa Pain

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Type of Publication: Original Research Paper

Conflicts of Interest: Nil

Abstract

Keywords: NIL

Introduction

1. Common indication for diagnostic laparoscopy by general surgeon is Chronic right iliac fossa pain with normal radiological and laboratory findings.
2. In case of diagnostic Inconclusiveness, laparoscopy may help to avoid unnecessary laparotomy and provide accurate diagnosis
3. Diagnostic laparoscopy is a minimally invasive technique for the diagnosis of intra-abdominal pathologies through direct visualization of intra abdominal organs.
4. Diagnostic laparoscopy also aids in tissue biopsy, culture acquisition, and a variety of therapeutic interventions.

Aim

1. The aim is to assess the utility of diagnostic laparoscopy as a tool to diagnose chronic right iliac fossa pain in patients where the radiological features are found to be normal
2. To find out the cause of chronic RIF pain in patients with normal radiological findings.

Materials And Methods

1. Prospective observational study done on 20 patients
2. Study duration : 1 year

3. Study Place : Department of general surgery, Chettinad hospital and research institute , kelambakkam, OMR, chennai.
4. Study population: All patients with chronic right iliac fossa pain attending OPD/IPD who fulfilled the inclusion criteria.

Inclusion Criteria

1. All patients of undiagnosed chronic right iliac fossa pain
2. Age group 18 to 70 years, both sexes
3. Patients with history of right iliac fossa pain for 12 weeks or more, if physical examination and diagnostic tests are inconclusive.
4. Patient consenting to study

Exclusion Criteria

1. All patients below 18 years old age and above 70 years are excluded
2. Pregnant ladies
3. Patients with coagulopathies , Malignancies
4. Patients who are not fit for general anaesthesia

Methodology

1. All patients from 18 to 70 years both sexes presenting to surgery opd with chronic right iliac

- fossa pain for (3 months and more) were admitted , informed consent was obtained .
2. Detailed history taking and clinical examination was done and patients were also subjected to routine blood investigations, urine routine, ECG; Radiological investigations: Chest xray, Xray Abdomen erect was done which also showed presence of no abnormalities
 3. USG abdomen with pelvis was also done showed no abnormality detected
 4. Patients, in whom imaging findings were not correlating /inconclusive with symptoms, were subjected diagnostic laparoscopy.
 5. d- Lap was carried out under General anaesthesia, prior to surgery anaesthetist fitness was obtained, all patients were catheterized and ryles tube insertion done prior to GA.
 6. Diagnostic laparoscopy was proceeded carefully detecting for any intra abdominal pathologies
 7. Surgical procedures was carried out based on intraoperative findings
 8. Post operatively patient was kept on NPO, adequate IV Fluids, antibiotics , antiemetics and analgesics was given, diet was started from next day pod 1
 9. Patients resumed normal activity within one week post surgery
 10. Patients was advised to follow up at 1st and 3rd months for the pain relief assessment after laparoscopy.
 11. At the 3rd month follow up, more than 90% people relieved with chronic RIF pain.

Results

AGE IN YEARS	N	%
18-30	9	45
31-40	6	30
41-50	3	15
51-60	1	05
61-70	1	05
TOTAL	20	100

SYMPTOMS	N	%
Abdominal pain	20	100
Fever	7	35
vomiting	8	40
Abdominal distension	4	20

Duration of pain in months	N	%
3-12	8	40
12-18	7	35
18-36	3	15
>36	2	10
Total	20	100

Laparoscopy Findings	Treatment	N	%
Post-operative adhesions	adhesiolysis	6	30
Recurrent Appendicitis	appendectomy	3	15
Subacute appendicitis	appendectomy	4	20
Inflamed Appendicitis	appendectomy	3	15
Terminal ileitis	conservative	1	5
Mesenteric Lymphadenopathy	biopsy	2	10
normal Study	-	1	5

Results

1. Most common age group involved 18 to 30 years (45%) followed by 31 to 40 years (30%), 41 to 50 years (15%), 51 to 60 years (5%), 61 to 70 years (5%)

2. Most of the patients presented with abdominal pain 100%, followed by vomiting 40%, fever 35%, abdominal distension 4%

3. 40 % presented with duration of pain for 3 -12 months, 35% presented with duration of pain for 12 -18 months, 15% 18 -36 months and 10% more than 36 months

4. The most common laparoscopy finding was Post-operative adhesions(30%) followed by subacute appendicitis(20%) ,followed by recurrent appendicitis (15%), inflamed appendicitis (15%),and mesenteric Lymphadenopathy (10 %), terminal ileitis(5%) and normal study in(5%)
5. Adhesiolysis was done in all patients with post-operative adhesions (patients who underwent adhesiolysis had previous history of lscs, abdominal hysterectomy, tubectomy , abdominal surgeries)
6. patients with recurrent appendicitis, sub-acute appendicitis and inflamed appendicitis underwent appendectomy
7. Terminal ileitis was managed conservatively and was on follow up
8. Biopsy was taken for mesenteric lymphadenopathy to rule out tuberculosis and lap appendectomy was done
9. In cases where the findings was normal underwent lap appendectomy ,
10. Post operative pain was assessed by VAS (Visual analog scale)

The mean VAS score at presentation was (8) . The VAS Score reduced in 1 month to (6) and 3 months to (4). There was significant improvement in VAS score at follow-up.

Discussion

1. Diagnostic laparoscopy is a convenient method of diagnosing the cause of right iliac fossa pain in cases where the radiological findings and laboratory parameters are not able to find the underlying pathology .
2. In this study Out of 20 patients 8 were male 12 were female , the most common age group affected was 18 to 30 years, and the most common cause of RIF pain was adhesions followed by subacute appendicitis, recurrent appendicitis ,inflamed appendicitis and mesenteric Lymphadenopathy, terminal ileitis and normal study was also observed.
3. In case of diagnostic Inconclusiveness, laparoscopy may help to avoid unnecessary laparotomy / negative laparotomy and provide accurate diagnosis
4. Unnecessary laparotomy is very stressful and painful, increases the duration of hospital

stay, increases the cost, and is associated with a morbidity of 5 to 20%.

5. The VAS Score reduced in 1 month follow up to (6) and 3 months follow up to (4).
6. This study also elicited that appendectomy in chronic right iliac fossa pain without any visible and radiological finding relieved the pain.

Conclusion

1. Diagnostic laparoscopy is minimal invasive surgery
2. It is useful in cases where with normal radiological and laboratory findings and in case of diagnostic Inconclusiveness
3. It prevents unnecessary laparotomies and supports faster recovery
4. laparoscopy point to a diagnosis, it has the added advantage that therapeutic intervention can be done at the same setting in most cases thus avoiding another hospitalization or another exploration of the abdomen.

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