



A CLINICO PATHOLOGICAL STUDY OF RIGHT ILIAC FOSSA MASS

Dr. A.bhaskar*	General Surgery resident ,PESIMSR ,KUPPAM*Corresponding Author
Dr.Thalari Shobha Rani	General Surgery resident , PESIMSR , KUPPAM
Dr.A. Abhiram	Assistant professor ,Dept of General Surgery , PESIMSR , KUPPAM

ABSTRACT **BACKGROUND AND OBJECTIVES:** The present study is to know the various diseases which can present with a mass in the right iliac fossa and also to study the various clinical presentation and also compare the clinical diagnosis and final diagnosis. **METHODS:** Source of data were patients with the mass in right iliac fossa admitted to PESIMSR, Kuppam. The study period was 1½ years (from MAY 2021 to APRIL 2022). It was a prospective type of study. **RESULTS:** The majority of the cases were related to the appendicular pathology 76.6 % either in the form of appendicular mass or abscess. The majority of patients were in 25-50 years of age. **CONCLUSION:** Appendicular pathology was the commonest cause of mass in the right iliac fossa. Almost all cases of appendicular abscess were managed surgically, and it was found to be effective. Cases of appendicular mass were managed conservatively, followed by appendicectomy 6 weeks later. The majority of patients with ileocaecal TB were managed conservatively on ATT, and those with obstructive features were operated and then received ATT postoperatively.

KEYWORDS : Mass, right iliac fossa, cases.

INTRODUCTION

Over the years, the abdomen has retained an element of fascination, offering an intriguing diagnostic challenge. The “Temple of surprises,” the “tomb of mysteries,” the “magic box of Pandora” — These various names precisely describe the enigma it holds for the surgeon from the ancient time till date.

Although an extensive subject, this study was undertaken to unravel some of the mystery of a mass in the right iliac fossa, the very presence of mass proving a diagnostic problem. The common conditions met are appendicular mass, ileocecal tuberculosis, carcinoma cecum, iliopsoas abscess, tubo ovarian mass, iliac adenitis, other rare conditions include unascended kidney, undescended testis, complicated or uncomplicated ectopic pregnancy, intussusception, amoeboma, actinomycosis, Crohn's disease, parietal wall abscess, chondrosarcoma, desmoids tumor, secondaries and aneurysms.

Appendicular lump is the commonest swelling in the right iliac region. The lump may be either an appendicular mass or an appendicular abscess. Important differential diagnosis is between appendicular mass, abscess, carcinoma caecum, and intestinal tuberculosis.

AIMS AND OBJECTIVE:

- 1) To Study various diseases that can present with a mass in the right iliac fossa.
- 2) Clinical presentation.
- 3) Comparison between clinical diagnosis and final diagnosis

METHODOLOGY

Source of data:

The study will be conducted on patients with a mass in the right iliac fossa admitted in PES Hospital attached to PESIMSR College, KUPPAM, between MAY 2021 to APRIL 2022.

Study design : PROSPECTIVE STUDY

Source of study : GENERAL SURGERY in-patients, PES hospital, KUPPAM.

Period of study : MAY 2021 to APRIL 2022.

Number of patients : 30 PATIENTS

Institution : PES Hospital attached to PES medical college, KUPPAM.

INCLUSION CRITERIA:

All the cases admitted to PES Hospital with the provisional diagnosis as right iliac fossa mass.

EXCLUSION CRITERIA:

Female patients with pathologies related to uterus and its adnexa were not included in this study. Similarly, mass arising from parietal

(anterior abdominal wall), vascular lesions, distended gallbladder.

RESULTS

Table 1. Incidence of various conditions

Final Diagnosis	No. of cases	Percentage
AM	7	23.33
A.Ab	16	53.33
Ileacel TB	2	6.67
Ca.C	1	3.33
Iliopsoas abscess	1	3.33
Others	3	10
Total	30	100.0

Table 2: Age incidence with RIF mass

Occupation	No of patient	Percentage
Coolie	5	16.6
Housewife	4	13.3
Student	8	26.6
Agriculturist	2	6.6
Laborer	5	16.6
Business	6	20
Total	30	100.0

Table 3. Sex incidence

Age (years)	FREQUENCY	PERCENTAGE
<15	4	13.33
16-25	5	16.67
26-50	14	46.67
>51	7	23.33
Total	30	100.00

Table 4. Occupation of the patient

Diagnosis	SEX	
	Female	Male
AM	2	5
A.Ab	6	10
Ileacel TB	2	0
Ca.C	1	0
Iliopsoas abscess	0	1
Others	2	1
Total	13	17

Table 5: Duration of symptoms

Diagnosis	No. of cases	<week	8-20 days	>21
Appendicular mass	7	7	0	0

Appendicular abscess	16	15	1	0
Ileocaecal tuberculosis	2	1	1	0
Ca.caecum	1	0	0	1
Ilio-psoas abscess	1	0	0	1
Others	3	2	1	0
Total	30	25	3	2
Percentage	100%	100%	100%	100%

Table 6: Symptoms (pain abdomen, fever, vomiting)

Diagnosis	No. of cases	Pain abdomen	Fever	Vomiting
Appendicular mass	7	7	6	4
Appendicular abscess	16	16	14	11
Ileocaecal tuberculosis	2	1	1	1
Ca.caecum	1	0	0	1
Iliopsoas abscess	1	0	0	0
Others	3	3	2	1

Table 7: Clinical signs

Clinical diagnosis	Final diagnosis
Appendicular mass	20
Appendicular abscess	0
Acute appendicitis	4
Ileo caecal TB	2
Ca. cecum	1
Iliopsoas abscess	1
Others	2
Total	30

Table 8: comparing clinical diagnosis and final diagnosis

Clinical signs	No. of cases	Percentage
Mass per abdomen	15	50
Tenderness	26	86.66
Consistency		
Soft	1	4.1
Firm	16	66.6
Hard	7	29.1
Mobility		
Restricted	6	25
Fixed	14	58.3
Mobile	4	16.6
Border		
Regular	13	54.1
Irregular	4	16.6
Diffuse	7	29.1

Table 9 : Surgical treatment

Post-op complications	No. of cases	Percentage
Wound infection	4	13.33
Mortality	1	3.33
Total	5	16.66

Table 10 : Complications (post-op follow up)

Type of surgery	No. of cases	Percentage
OS regime with appendicectomy	4	13.33
Immediate laparotomy with appendicectomy	4	13.33
Abscess drainage + appendectomy	16	53.33
EP drainage	1	3.33
Right hemicolectomy	2	6.66
Resection and anastomosis	3	10
Total	30	10

DISCUSSION

Our study clinico pathological study on right iliac fossa mass was done in patients in Dept of general surgery , PES Institute of medical sciences and research, kuppam , totally we studied 30 patients. Among them, in

this study, 76.6% of cases were related to the appendicular pathology either in the form of appendicular mass and appendicular abscess. The incidence of a patient presenting with RIF commonly seen between the age of 26-50 years.

The highest incidence of ileocaecal tuberculosis was found between 20-40 yrs, according to Prakash ATM et al.³² In our study, and it was more common in middle age. As seen in above Table, appendicular mass (3:1), all cases of an appendicular abscess and ileocaecal TB predominantly seen in males. According to Nagar RC et al., the male to female ratio was (4.7:1) in appendicular mass.

In our study, females were commonly affected in ileocecal TB. In a study by Pescatori et al. 71% of patients were males, and 46% were females. In the series done by MC Dermott et al., 51% were males, and 49% were females.³⁵

Appendicular mass is most likely to be present in patients who have come to the surgeon after 48 hours or so often with the onset of symptoms. This is nothing but matting together of omentum, terminal ileum, and cecum around the inflamed appendix. In our study, 50% of patients with ileocaecal tuberculosis presented with fever and patients with the features of intestinal obstruction had vomiting. 50% of these cases had associated pulmonary tuberculosis. Tubercular enteritis is commonest in the ileocaecal region in a series conducted by ATM Prakash³⁹ and also series conducted by Bhansali SK, followed by the involvement of ileum as the next common site.

In the present study, 50% of cases, duration of symptoms was between 1 to 3 months, 25% of patients presented between 2 to 30 days, and 25% of the patient presented between 3 to 6 months. According to Prakash ATM et al³⁹, 27% of cases had a duration of symptoms < 6 months, and 43% of cases had a duration ranging from 6 months to 3 years.

Carcinoma caecum accounted for 18% of the colorectal cancers. According to Crerand S, et al.⁴¹ According to their study, carcinoma caecum was more common in patients over 60 years and in elderly females. In this study, ca. cecum be presented with mass per abdomen, with the feature of loss of weight. The average duration of symptoms was from 1-6 months.

In the present study, out of 7 cases of the appendicular mass of which Oschner Sherrin's regime initially managed 4 cases and later appendicectomy was done after six weeks. According to Gaher Kamble DB et al⁴⁴ "in situ," delayed appendicectomy seems beneficial for all the patients who respond well to the initial management of appendicular mass. Other patients who underwent immediate management surgically. Patients who are managed conservatively and not willing for surgery were not included in this study. The management of appendicular mass is surrounded by controversy.

Investigations used in the diagnosis of appendicular abscess were ultrasound and computerized tomography. In the present study, ultrasound was done for all patients, and CT was done to confirm the diagnosis. The diagnostic accuracy with CT, i.e., 92 to 97% sensitivity, 85 to 94% specificity, 90-98% accuracy.⁴⁹

In the present study, all cases of appendicular abscess underwent immediate drainage of pus f/b appendicectomy. Patients who had diffuse peritonitis must undergo immediate appendicectomy, but other patients can be managed with intravenous antibiotics and percutaneous drainage of the abscess if suitable, but after draining the abscess, then visible appendix seems to be perforated or gangrenous and surrounding cecum and ileum appears healthy then must undergo appendicectomy.

After the expectant management interval, appendectomy can be offered in the light of the significant risk that appendicitis may recur, and a low morbidity rate is associated with these procedures.

In the present study, all cases of ileocaecal tuberculosis underwent ultrasonography of abdomen, barium studies, and CT abdomen. 50% had associated pulmonary Kochs, as seen in chest X-ray.

In the present study, 2 cases underwent right hemicolectomy. According to a study done by H.B. Byrnes et al resection rather than the bypass of the diseased bowel is the preferred surgical treatment.

Resection by right hemicolectomy should be carried out where possible.⁶ In certain circumstances (for an, e.g., poor general condition or concurrent procedure making a lengthy procedure unwise), a temporary intertransverse colostomy is a sensible compromise.

In the present study, 100% of cases underwent definitive surgery and followed by this, and the patients were put on antituberculous therapy. These patients responded well. The standard regimen used was the first two months of intensive phase 2 (HRZE) 3 and the next four months of continuation phase 4 (HR) 3. Category I regimen- DOTS, Dr. D. Banerji et al.⁶⁰ After surgery, resected specimens were sent for HPE, and the report showed it as the caseating granulomatous lesion.

In the present study, case of ca caecum underwent an ultrasound Of the abdomen, barium studies, and CT abdomen and pelvis. NGB Richardson et al⁷ said that sensitivity, specificity, and accuracy of abdominal USG in colonic tumors considered to be consistent with Colonic carcinoma was 96% and 97%, respectively.

Among the two right hemicolectomy cases, all were sent for histopathological examination, and one reported as moderately differentiated adenocarcinoma . and another specimen reported as the granulomatous lesion, i.e., ileocecal TB which caused severe stricture in the terminal ileum. Post-operative complications: In our study, 4 patients developed wound infection following surgery, and one patient of carcinoma caecum died while on chemotherapy.

CONCLUSION

- Appendicular pathology (76.6%), either in the form of appendicular mass or appendicular abscess , was the commonest cause of mass in the right iliac fossa .
- Mass in right iliac fossa was common in the age group of 25-50 years.
- The overall incidence was more in males as compared to females (3:1)
- In ileocecal, tuberculosis more commonly seen in females.
- The diseases were more common in people from low socioeconomic status and the commonest symptom was a pain in the abdomen .
- USG abdomen was the 1st investigation of choice and it had a sensitivity of 100%.
- In patients with appendicular mass, initially conservative management with Oschner Sherrin's regime was done , followed by interval appendicectomy . this had good results .
- Patients with appendicular abscess underwent immediate appendicectomy and the complication were less . the only complication seen was wound infection .
- Cases of ileocaecal tuberculosis received ATT fr 6 months postoperatively .

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