

## Evaluation of Pathological nature of the right iliac fossa mass and its management

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### Abstract:

Iliac artery aneurysm can be congenital, traumatic or infective. Clinically it presents as a mass in the right iliac fossa which is a pulsatile one. Chondrosarcoma of the ilium is usually a secondary chondrosacroma i.e. there is a malignant transformation of a pre-existing exostosis. Clinically it is a bony hard swelling over the crest of the ilium. In the sex distribution study of 100 cases, 60 cases were males and 40 cases were females. Male preponderance is found in appendicular pathology. The appendicular pathology is seen in the younger age group with the maximum in the third decade, while carcinoma in the sixth and seventh decade of life. In ileo caccal tuberculosis maximum affected were in between 21-40 years of age. Hematological investigations shows that in 58 cases of appendicular pathology the total WBC count was increased in 44 cases with increase in polymorpho nuclear cells. In 18 cases of ileocaecal tuberculosis, increases in lymphocytes were seen in 14. In 40 cases of appendicular mass, 10 cases were immediately operated after diagnosis, while other 30 were planned for interval appendicectomy.

**Key words:** Iliac fossa, Chondrosarcoma, Abdomen

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### Introduction:

The ulcerative form of the disease is very likely the result of the disease of blood supply, probably through an endarteritis. There is an accumulation of collagenous tissue during the process of ulcer healing that subsequently contracts and may cause circumferential structure of the bowel lumen and obstruction. The hyper trophic form usually occurs in ileocecal area and the colon. It features florid inflammatory fibroblastic reaction in the submucosa and subserosa.

Enlargement of iliac group of lymph nodes may produce lump in this region with psoas spasm. The cause can be classified into infective and malignant. Aneurysms make up 10% or more of the operative experience

of most active vascular surgeons. The most common aneurysm, arteriosclerotic abdominal aortic aneurysm was found in almost 2% of consecutive postmortem examinations. Iliac artery aneurysm can be congenital, traumatic or infective. Clinically it presents as a mass in the right iliac fossa which is a pulsatile one.

Chondrosarcoma of the ilium is usually a secondary chondrosacroma i.e. there is a malignant transformation of a pre-existing exostosis. Clinically it is a bony hard swelling over the crest of the ilium. X-ray shows the bony exostosis with patchy calcification but the clearest sign of malignant change is a demonstrable progressive enlargement of an osteochondroma after the end of normal bone growth. CT scan and MRI should be

carried out to show the extend of the tumor. A biopsy can confirm the diagnosis and give a picture about the degree of differentiation. It is a slow growing tumour and is ideal for wide excision. They do not respond to radio or chemotherapy.

### **Materials and Methods:**

This is a prospective study of cases of right iliac fossa mass. These cases are taken from various surgical units of RMMCH, Annamalainagar admitted during the period 2000-2002.

Various points of value in history of illness are recorded and analysed. Clinical features are computed. Different biochemical investigations including routine investigations are done. Available radiological investigations wherever necessary are done and analysed in correlation with operative findings.

Detailed history was taken with reference to age, sex, pain, nausea, vomiting, fever and mass. Past history and family history regarding pulmonary tuberculosis are enquired.

Examination of the patients include general examinations with regard to built, evidence of acute infection or cachexia, systemic examination, complete examination of the abdomen including the site, consistency, mobility of the mass right iliac fossa and respiratory, cardiovascular and central nervous system are also examined.

Investigations were carried out for blood, skin, stool for occult blood, radiological, invasive investigations and pathological.

### **Results and Discussion:**

#### **Epidemiology:**

In the sex distribution study of 100 cases, 60 cases were males and 40 cases were females. Male preponderance is found in appendicular pathology. In other conditions like ileo caecal tuberculosis and carcinoma caecum there is not much of difference. It was presented in table 1.

**Table 1:** Sex distribution of the study

<b>Conditions M</b>	<b>Male</b>	<b>Female</b>
Appendicular Mass	24	16
Appendicular Abscess	10	8
Ileo caecal tuberculosis	10	8
Carcinoma caecum	8	6
Psoas abscess	4	-
Iliac lymphadenopathy	2	-
Parietal abscess	1	-
Ovarian cyst	-	2
Chondrosarcoma ileum	1	-

In age distribution we found that the youngest patient in our study was 13 and the oldest was 75. The appendicular pathology is seen in the younger age group with the maximum in the third decade, while carcinoma in the sixth and seventh decade of life. In ileo caecal tuberculosis maximum affected were in between 21-40 years of age which was presented in table 2.

**Table 2:** Age distribution of the patients

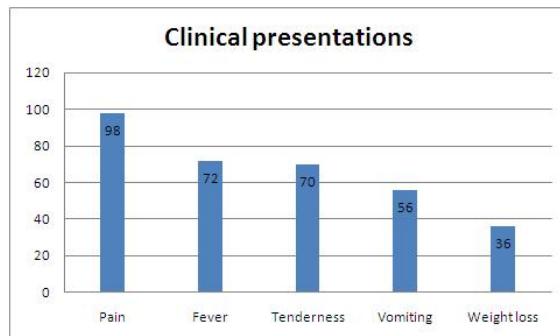
<b>Age Appen dicular mass</b>	<b>Appendicular abscess</b>	<b>Ileo Caecal tuberculosis</b>	<b>Carcinoma Caecum</b>
13-20	12	4	1
21-30	14	6	4
31-40	10	5	6
41-50	0	4	3
51-60	3	0	3
>61	0	0	5

In the pathology study out of 100 cases, 58 cases were Appendicular pathology, 18 cases ileological tuberculosis, 14 cases carcinoma cecum, 4 cases of psoas abscess and 2 cases of iliac lymph adenopathy. In the four cases of psoas abscess, two were cold abscess due to tuberculosis and the other two were pyogenic abscess. Out of 18 cases of ileocaecal tuberculosis, only 7 patients had evidence of pulmonary tuberculosis. Two patients had an extensive lesion from the ileocecal junction to the splenic flexure with a focus in the lung but did not have any symptoms suggestive of tuberculosis and presented with signs of appendicitis. In carcinoma caecum, all cases presented in stage B and C. one case had both features of carcinoma caecum and ileocecal tuberculosis. The 2 cases of iliac lymph adenopathy were filarial in origin.

Almost all patients, except two had pain as their presenting symptoms. It is interesting that even cases of carcinoma caecum present with pain abdomen may be because of tumor infiltration into the base of the appendix.

Vomiting was present in more than half the number of patients. Patients with appendicular pathology had more of nausea than vomiting but patients with ileocaecal tuberculosis and carcinoma caecum had vomiting. Fewer was present in almost all patients of appendicular pathology. One third of ileocaecal tuberculosis had no history of fever. Weight loss was seen in all carcinoma patients. All patients with appendicular pathology and ileocaecal tuberculosis had a tender mass. One case of chondrosarcoma ileum presented with

pathological fracture of the superior pubic ramus . the study was presented in chart 1.



**Chart 1:**Clinical presentations

Hematological investigations shows that in 58 cases of appendicular pathology the total WBC count was increased in 44 cases with increase in polymorpho nuclear cells. In 18 cases of ileocaecal tuberculosis, increases in lymphocytes were seen in 14. USG abdomen in appendicular pathology, particularly abscess, was confirmatory in all cases. Barium study was done for 22 cases in which 18 had most of the classical features of ileocaecal tuberculosis and carcinoma caecum. Diagnostic laparoscopy was done for 8 cases out of which 5 were females and 3 were males. In females diagnostic was useful to rule out any other gynaecological pathology.

In 40 cases of appendicular mass, 10 cases were immediately operated after diagnosis, while other 30 were planned for interval appendicectomy. Of the 10 cases no morbidity or mortality were noted. In 18 cases of appendicular abscess, abscess alone was done for 4 cases while abscess drainage with appendicectomy for 14 cases, where the appendix was identified to lie free in the abscess cavity. In 18 cases of ileocaecal tuberculosis, all cases were started on ATT-

2 cases were operational who presented with feature of appendicitis. In 14 cases of carcinoma caecum, a classical right hemicolectomy was done. In 2 case of tuberculous cold abscess, the abscess was drained and ATT started simultaneously. Acid Fast Bacillus could not be isolated but patient improved well.

#### Conclusion:

Appendicular pathology continues to be the most common cause for the right iliac fossa mass. Appendicular mass need not necessarily be conservatively treated, as we had not found increase in morbidity or hospital stay following immediate surgical intervention. In Appendicular abscess Appendectomy and drainage can be attempted. In ileocaecal tuberculosis, pulmonary lesion is an uncommon presentation. Extensive ileocaecal tuberculosis can prevent without much of symptoms or can present with signs and symptoms of appendicitis. Incidence of abdominal tuberculosis has reduced due to generous use of antituberculosis drugs. Carcinoma caecum can also present in association with caecal tuberculosis. Psoas abscess could also be pyogenic in origin. Laparoscopy has a very good diagnostic value, and is useful in avoiding unnecessary laparotomy.

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