



## Clinical Study of Pain in Right Iliac Fossa at Tertiary Care Hospital in Western Rajasthan

Authors

**Anand Godara<sup>1</sup>, Ashok Parmar<sup>2</sup>, Ashok Kumar<sup>3</sup>**

<sup>1,3</sup>Resident Doctor, <sup>2</sup>Senior Professor and Head of Department

Department of Surgery, Sardar Patel Medical College & AGH, Bikaner, Rajasthan

Corresponding Author

**Anand Godara**

Resident Doctor, Department of Surgery, Sardar Patel Medical College & AGH, Bikaner, Rajasthan

### Abstract

**Background:** A mass in the right iliac fossa is a common diagnostic problem encountered in clinical practice, requiring skill in diagnosis.

**Methods:** 100 patients with signs and symptoms of right iliac fossa mass admitted PBM Hospital were identified and were studied by taking detailed clinical history, physical examination and were subjected to various investigations like x ray erect abdomen, chest x-ray, contrast x-ray.

**Result:** In this study of 100 cases more than 50% of cases were related to appendicular pathology either in the form of appendicular mass or appendicular abscess and There were 18 cases of ileocaecal tuberculosis.

**Conclusion:** Appendicular lump remains the most common cause for right iliac fossa mass. Ileocaecal tuberculosis is one of the most important differential diagnoses for pain abdomen in rural population.

**Keywords:** Appendicular mass, ileocaecal tuberculosis, carcinoma caecum, right iliac fossa mass.

### Introduction

A mass in the right iliac fossa is a common diagnostic problem encountered in clinical practice, requiring skill in diagnosis. A swelling in the right iliac fossa may arise from the structures normally present in that region or from structures, which are abnormally situated in the region<sup>1</sup>.

Patient with mass in the right iliac fossa may confront the surgeon, pediatrician obstetrician and gynaecologist. A thorough understanding of the anatomy and pathological processes that may occur within the abdomen are essential for an accurate diagnosis and management. Some patients will need immediate surgical intervention,

whereas others will improve with conservative treatment<sup>2-4</sup>.

### Material and Methods

**Study Design:** Hospital prospective based study.

**Study Duration:** 12 months (August 2016 to July 2017).

**Study Place:** Dept. of Surgery, S.P.Medical College and P.B.M Hospital, Bikaner

**Study Population:** All patients with pain in right iliac fossa.

**Sample Size:** 100 patients reporting to the Surgery dept. within study duration and eligible as per inclusion criteria will be included in the study.

**Sampling Method:** Convenience sampling

#### Inclusion Criteria

- patients attending the surgical OPD with pain in right iliac fossa

#### Exclusion Criteria

- Pregnant Women
- Terminally ill cancer patients.

**Data Collection:** All the patients were evaluated as per the proforma.

A written and informed consent was taken from the patient after explaining details of treatment modalities.

Clinical diagnosis was confirmed by relevant investigations (routine investigations of blood/urine and ultrasonography and CT scan if required) and patient will be managed appropriately.

After confirming the diagnosis and depending on patient's condition appropriate surgery was performed if necessary.

#### Data Analysis

To collect required information from eligible patients a pre-structured pre-tested Proforma was used. For data analysis Microsoft excel and statistical software SPSS was used and data will be analyzed with the help of frequencies, figures, proportions, measures of central tendency, appropriate statistical test.

#### Results

This study of 100 cases of Pain in the right iliac fossa was done over a period of 12 months August 2016 to July 2017. Maximum (29%) patients belong to 21-30yrs age group. 67% patients were male and 33% were female.

**Table no.1** Incidence of diagnosis of various conditions.

Various conditions	No. of patients
Appendicular mass	46
Appendicular abscess	12
Ileocaecal tuberculosis	18
Carcinoma of caecum	12
Psoas abscess	6
Others	6
Totals	100

In this study of 100 cases more than 50% of cases were related to appendicular pathology either in the form of appendicular mass or appendicular

abscess. There were 18 cases of ileocaecal tuberculosis.

**Table no.2.** symptoms various conditions.

Various conditions	No. of patients	Fever	Vomiting	Weight loss
Appendicular mass	46	26(56.52%)	20(43.48%)	0(0.00%)
Appendicular abscess	12	6(50.00%)	4(33.33%)	0(0.00%)
Ileocaecal tuberculosis	18	16(88.89%)	6(33.33%)	14(77.78%)
Carcinoma of caecum	12	0(0.00%)	6(50.00%)	10(83.33%)
Psoas abscess	6	6(100.00%)	0(0.00%)	3(50.00%)
Others	6	3(50.00%)	6(33.33%)	0(0.00%)
Totals	100	42(42.00%)	42(42.00%)	27(27.00%)

In this study 56.52% of appendicular mass presented with fever and 43.48% presented with vomiting. In cases of appendicular abscess 50% presented with fever and 33.33% presented with vomiting. Out of 18 cases of ileocaecal tuberculosis, 16 cases presented with fever, 6 cases with vomiting and 14 cases with loss of weight. In 12 cases of carcinoma caecum 6 cases gave history of occasional vomiting and almost 10 cases gave history of loss of weight. Out of 6 cases of psoas abscess 6 presented with fever.

**Table no.3** Duration of symptoms various conditions.

Various conditions	No. of patients	Duration			
		2-30 Day	1-3 months	3-6 months	More than 6 months
Appendicular mass	46	44	2	0	0
Appendicular abscess	12	12	0	0	0
Ileocaecal tuberculosis	18	9	6	0	3
Carcinoma of caecum	12	4	1	4	3
Psoas abscess	6	0	4	1	1
Others	6	3	3	0	0
Totals	100	72	16	05	07

In present study patients with appendicular mass presented with pain initially around umbilicus which later shifted to right iliac fossa. 95.65% of cases of appendicular mass presented within 30 days. In appendicular abscess 100% cases presented within 1 month. In this series out of 12 cases of carcinoma caecum, 4 cases presented within 30 days, 1 case presented between 1-3 months, 4 cases presented between 3-6 months and at 3 case presented after 6months. 4 cases of psoas abscess presented between 1-3 months.

**Table no.4** Distribution Mass Abdomen (Symptom) of various conditions.

Various conditions	Complaints	
	Total no. of cases	No. of case with present mass abdomen
Appendicular mass	46	3(6.52%)
Appendicular abscess	12	3(25%)
Ileocaecal tuberculosis	18	2(11.11%)
Carcinoma of caecum	12	7(58.33%)
Psoas abscess	6	6(100%)
Others	6	6(100%)
Totals	100	27(54%)

In this study only 3 of appendicular mass and 3 abscess presented with complaints of mass. 11.11 % of ileocaecal tuberculosis patients complained of mass, but 58.33% of carcinoma caecum presented with mass. 100 % cases of psoas abscess and others complained of mass.

### Discussion

This study of Pain in the right iliac fossa was made at P.B.M. Hospital, Bikaner, from Aug.2016 to July 2017. 100 cases of pain in the right iliac fossa were studied.

In present study maximum age incidence was in 3rd decade (26%) followed by 2nd decade (20%). It was more common in males than females (2.03:1). 64 % patients were from rural area and 36% were from urban area. 48% of patients were farmer, labourer and 14% patients was business men.

According to R.C. Nagar et al<sup>5</sup> appendicular mass was more common in 3rd, 4th and 2nd decades of life. Male to female ratio was 19:4 (4.7:1).

This formed 46% of cases of present study. Most of the patients came to the hospital for pain of duration of less than one month. They complained of colicky pain, initially around umbilicus which later shifted to right iliac fossa. Some patients had associated vomiting. According to Bailey and Love, on the third day (rarely sooner) after the commencement of an attack of acute appendicitis, a tender mass can frequently be felt in the right iliac fossa beneath some rigidity of the overlying musculature, the other quadrants of the abdomen being free from rigidity or tenderness.

According to R. C. Nagar et al<sup>5</sup>, 38 out of 46 cases had rigidity and tenderness was present in 43 out of 46 cases. In present series, history of pain and vomiting is given by all patients. All patients had masses which were tender and firm.

According to Erik Skoubo – Kristensen<sup>6</sup> et al 55% of his appendicular mass cases experienced febrile episodes with temperature > 39.0 c. In present study 56.92% of cases presented with fever and in 76.16 % of cases, Hb % was above 10 gms%. In present series, 59% of patients were treated conservatively by Oschner Sherren regimen. Nil by mouth, Ryles tube aspiration, antibiotics and IV fluids. This decision was based on fact that nature has already localised the lesion and it is unwise to disturb these barriers. Inadvertent surgery at this time is dangerous, difficult and bloody.

### Conclusion

More than 50% of pain right iliac fossa cases were related to appendicular pathology either in the form of appendicular mass or appendicular abscess.

### References

1. Adalla S.A. Appendiceal mass: Interval appendicectomy should not be the rule. Br J Gin Pract, 1996 Apr-May; 50(3); 168-9.
2. Armstrong C.P., Ahsan Z., et al: Carcinoma of caecum. J of Royal College of Surg, Edinburgh, 1995 : 35.
3. Bailey and Love's Short practice of Surgery, 22nd Edn., ELBS with Chapman and Hall, London, 1995.
4. Barry Foran, Thomas V Berne, Leonard Rosoft: Management of appendiceal mass. Arch Surg, 1978 Oct; 113: 1144-1145.
5. Nagar R. C. and Karwan D.L. : Appendix mass - Early appendicectomy or conservative therapy?. IJS, 259-262.
6. Erik Skoubo - Kristensen, Ivan Huid : Appendiceal mass - Results of Conservative management. Ann Surg, 1982 Nov; 196(5): 584-587.