

Original Research Article

Evaluation of various symptoms in subjects with mass in right iliac fossa

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ABSTRACT

Background: Mass in right iliac fossa is a very common condition a surgeon will come across in day to day practise. This study was aimed at assessing various symptoms with which subjects with mass in right iliac fossa present to clinician.

Methods: 50 eligible subjects admitted in K. R. Hospital who were diagnosed to have mass in right iliac fossa clinically or radiologically were selected after informed valid consent. A proper history, thorough clinical examination and relevant investigations were done to diagnose the pathology. Various symptoms were assessed.

Results: In our study, the various conditions which presented as mass in right iliac fossa were appendicular mass (42%), appendicular abscess (16%), ileocaecal tuberculosis (24%), carcinoma caecum (14%), ileopsoas abscess (4%). Various symptoms with which subjects presented were pain abdomen (88%), fever (78%), vomiting (30%), mass per abdomen (28%), weight loss (38%), bleeding per rectum (12%) and bowel disturbances (16%). Appendicular pathology was most common cause in younger age group and carcinoma caecum and ileocaecal TB was more prevalent in older age group.

Conclusions: Various symptoms with which subjects presented were pain abdomen, fever, vomiting, mass per abdomen, weight loss, bleeding per rectum and bowel disturbances. Pain abdomen was the most common symptom in subjects with mass in right iliac fossa. Mass per abdomen as a symptom was found in 28% of the subjects.

Keywords: Mass, Right iliac fossa, Symptoms

INTRODUCTION

Mass in right iliac fossa is a very common condition presenting in a surgical department. Diagnosing an abdominal pathology is a very challenging task a surgeon will always encounter. As they say that the abdomen is a Pandora's box or temple of surprises, we encounter surprises during abdominal surgeries.

The most common diseases which present as mass in right iliac fossa are appendicular mass, appendicular abscess, ileocaecal TB, carcinoma of caecum, psoas

abscess, tubo-ovarian mass in females, desmoid tumours, impaction of round worms, mesenteric lymphadenitis etc. Patients with mass in right iliac fossa may present to clinician with various symptoms like pain abdomen, vomiting, fever, mass per abdomen, discomfort in abdomen, weight loss, bleeding per rectum, anorexia and bowel disturbances etc. According to studies conducted by Raju et al, Graham GRB et al and Shetty SK et al, appendicular pathology was the most common cause of mass in right iliac fossa.¹⁻³ This study aimed at analysing the various symptoms in subjects with mass in right iliac fossa.

METHODS

This study was conducted in K R Hospital, Mysuru, Karnataka, India between January 2015 and December 2015. 50 eligible subjects with mass in right iliac fossa diagnosed clinically or radiologically were selected for the study after informed valid consent.

Inclusion criteria

Subjects in K R Hospital, Mysore having right iliac fossa mass detected either clinically or on radiological investigation of abdomen.

Exclusion criteria

Age < 18 years and >75 years

Female patients with diseases of uterus and ovaries. Descriptive study with subjects admitted with mass in right iliac fossa diagnosed clinically or radiologically were assessed for various symptoms. Detailed history was taken and thorough clinical examination was done. Relevant investigations like complete blood count, ultra sound abdomen, ESR, contrast enhanced CT abdomen etc. were done according to the case requirement. Proper treatment according to the diagnosis was given.

RESULTS

In our study 58% of cases were related to Appendicular pathology. Among them 42% were appendicular mass and 16% were appendicular abscess. The incidence of ileocaecal TB was 24%, carcinoma caecum was 14%, and ileopsoas abscess was 4% (Table 1).

Table 1: Conditions presented as mass in right iliac fossa.

Diagnosis	No. of cases	Percentage
Appendicular mass (AP mass)	21	42%
Appendicular abscess (AP ABS)	8	16%
Ileopsoas abscess (IPS abs)	2	4%
Carcinoma caecum (cacaecum)	7	14%
Ileocaecal TB (IC TB)	12	24%
Total	50	100%

In this study 88% of subjects had Pain abdomen, 78% had fever, 30% had vomiting, 28% had mass per abdomen, 38% had weight loss, 12% had bleeding per rectum and 16% had bowel disturbance. Most common symptom was Pain abdomen. 28% of the subjects had mass per abdomen as presenting complaints (Table 2).

In appendicular mass 100% of the subjects had pain abdomen, 86% had fever, 52.38% had vomiting and 14.28% had mass per abdomen on presentation (Table 3).

Table 2: Various symptoms.

Symptoms	No. of cases	Percentage
Pain abdomen	44	88%
Fever	39	78%
Vomiting	15	30%
Mass per abdomen	14	28%
Weight loss	19	38%
Bleeding PR	6	12%
Bowel disturbance	8	16%

Table 3: Symptoms in appendicular mass.

Symptoms	No. of cases	Percentage
Pain abdomen	21	100%
Fever	18	86%
Vomiting	11	52.38%
Mass per abdomen	3	14.28%
Weight loss	0	0
Bleeding PR	0	0
Bowel disturbance	0	0

Table 4: Symptoms in appendicular abscess.

Symptoms	No. of cases	Percentage
Pain abdomen	8	100%
Fever	8	100%
Vomiting	4	50%
Mass per abdomen	2	25%
Weight loss	0	0
Bleeding PR	0	0
Bowel disturbance	0	0

Table 5: Symptoms in ileocaecal tuberculosis.

Symptoms	No. of cases	Percentage
Pain abdomen	10	83.33%
Fever	11	91.66%
Vomiting	0	0
Mass per abdomen	5	41.66%
Weight loss	12	100%
Bleeding PR	0	0
Bowel disturbance	1	8.33%

Among appendicular abscess pain abdomen and fever was present in 100% of subjects while 50% had vomiting and 25% had mass per abdomen on presentation (Table 4). In ileocaecal TB 83.33% had pain abdomen, 91.66% had fever, 41.66% had mass per abdomen, 100% had weight loss and 8.33% had bowel disturbance (Table 5).

Among patients with carcinoma caecum 43% had pain abdomen, 57% had mass per abdomen, 100% had weight

loss and bowel disturbances and 85.7 % had bleeding per rectum (Table 6).

Table 6: Symptoms in carcinoma caecum.

Symptoms	No. of cases	Percentage
Pain abdomen	3	43%
Fever	0	0
Vomiting	0	0
Mass per abdomen	4	57%
Weight loss	7	100%
Bleeding PR	6	85.7%
Bowel disturbance	7	100%

In patients with ileopsoas abscess 100% had pain abdomen and fever and 50% of subjects had weight loss (Table 7).

Table 8: Mass per abdomen as symptom.

Diagnosis	No. of cases	Mass per abdomen	Percentage
Appendicular mass	21	3	14%
Appendicular abscess	8	2	25%
Ileopsoas abscess	2	0	0
Carcinoma caecum	7	4	57%
Ileocaecal TB	12	5	42%

In this study 14% subjects with appendicular mass, 25% with appendicular abscess, 57% of carcinoma caecum and 42% of subjects with ileocaecal TB had mass per abdomen as presenting complaint (Table 8).

DISCUSSION

Mass in right iliac fossa is a very common condition a surgeon encounter in the practice. The pathological process leading to mass in right iliac fossa are numerous and hence a proper evaluation of the case is mandatory to arrive at a diagnosis. Appendicular pathologies namely appendicular mass and abscess are the most common aetiology for mass in right iliac fossa. The various other causes are, ileocaecal TB, carcinoma of caecum, psoas abscess, tubo-ovarian mass in females, desmoid tumours, impaction of round worms, mesenteric lymphadenitis etc. The various symptoms with which the subjects can present are pain abdomen, vomiting, fever, mass per abdomen, discomfort in abdomen, weight loss, bleeding per rectum, anorexia and bowel disturbances etc. In this study 58% of cases were related to appendicular pathology. Among them 42% were appendicular mass and 16% were Appendicular abscess. The incidence of ileocaecal TB was 24%, carcinoma caecum was 14%, and ileopsoas abscess was 4% (Table 1).

In this study 88% of subjects had pain abdomen, 78% had fever, 30% had vomiting, 28% had mass per abdomen, 38% had weight loss, 12% had bleeding per rectum and 16% had bowel disturbance. Pain abdomen was overall the most common symptom. According to a study conducted by Shetty SK et al, also observed that pain abdomen was most common symptom.³

In appendicular pathology, all the subjects had pain abdomen and fever in our study. In a study conducted by Sunil Kumar M et al. 4 fevers were the most common symptom in subjects with appendicular pathology. In our study, all subjects with ileocaecal tuberculosis had weight loss and most of them had fever and pain abdomen, 42% of the subjects had mass per abdomen. In a study conducted by Rai S et al the common complaints were pain abdomen and weight loss and in a study conducted by Elhence et al, around 18.2% subjects had palpable mass.^{5,6} In present study all subjects with carcinoma caecum had weight loss and bowel disturbance, a study conducted by Goligher J et al, had similar results.⁷ Most common symptom in subjects with ileopsoas abscess in our study was pain abdomen, a study conducted by Adelekan et al had similar observation.⁸ Overall pain abdomen was the most common symptom in subjects with mass in right iliac fossa in our study. Mass abdomen as a symptom was observed in 14.28% of subjects.

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REFERENCES

1. Raju B, Gautham Reddy. A Clinical study of right iliac fossa mass. Indian J Applied Res. 2016;6(4):82-5.
2. Graham GRB, Vijaybhasker V. Evaluation of Right iliac fossa mass - a retrospective study. J Evolut Med Dent Sci. 2016;5(3):200-14.
3. Shetty SK, Shankar M. A clinical study of right iliac fossa mass. Int J Surg. 2013;30(4):1-20.
4. Sunil Kumar M, Mohan, Sarath Babu K, Deepak Hongaiah, Pradeep Kumar T, Balakrishna MA. Comparison of different symptoms in patients having mass in right iliac fossa. Int J Analyt Pharma Biomed Sci. 2014;3(1):43-6.
5. Elhence IP, Sharma BD. Surgical treatment of abdominal tuberculosis. IJS. 1984;46(647):337-40.
6. Rai S, Thomas WM. Diagnosis of abdominal tuberculosis: the importance of laparoscopy. Soc Med. 2003;96(12):586-8.
7. Goligher JC. Surgery of anus, rectum and colon. 1992;1:426-89.
8. Adelekan MO, Taiwo SS, Onlie BA. A review of psoas abscess. African J Clin Experiment Microbiol. 2004;6(1):55-63.

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