

ORIGINAL RESEARCH

A Clinical Study Of Right Iliac Fossa Mass

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ABSTRACT

INTRODUCTION: The human abdomen, a complex and vital region of the body, harbours numerous structures susceptible to various pathologies, including the development of masses. Among these, masses located in the right iliac fossa (RIF) present a particular clinical challenge due to their diverse etiologies and potential complications. **AIMS & OBJECTIVES** Investigating different illnesses that may manifest as a mass in the right iliac fossa. Monitoring the cases studied for ongoing management and complication detection. **MATERIALS AND METHODS** This is a study of 100 cases of mass in the right iliac fossa admitted to Mahatma Gandhi memorial hospital, Warangal during the period from August 2022 to April 2024 over a span of 20 months. **RESULTS** RIF mass predominantly originates from conditions affecting the appendix, primarily manifesting as appendicular mass and abscess. This is followed by cases of carcinoma of the cecum and ileocecal tuberculosis. **DISCUSSION** This is a study of 100 cases of mass in the right iliac fossa admitted to Mahatma Gandhi memorial hospital, Warangal during the period from August 2022 to April 2024 over a span of 20 months. **CONCLUSION** The highest occurrence of masses in the right iliac fossa was observed in patients in their 30s and 40s. The majority of our patients were from low socio-economic backgrounds.

KEY WORDS Appendicular mass, carcinoma caecum, right iliac fossa.

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INTRODUCTION

The human abdomen is a complex and essential area of the body that contains numerous structures vulnerable to a variety of pathologies, including the formation of masses. Masses found in the right iliac fossa (RIF) pose a unique clinical challenge due to their varied causes and potential complications. It is imperative for healthcare professionals to comprehend the investigation, management, and importance of masses in this area to ensure optimal patient care. This intricate task of delineating the specific clinicopathological characteristics of masses in the RIF has motivated me to pursue this study. The objective of the current research is to identify distinct clinicopathological entities associated with masses in the right iliac fossa, as well as to assess the relative incidence of different pathologies observed at MGM Hospital in Warangal, all in an effort to mitigate morbidity and mortality. A thorough review of relevant literature has been conducted.

AIMS & OBJECTIVES

Conducting an investigation into various medical conditions that could present as a mass in the right iliac fossa. Assessing the demographic distribution in

terms of age and gender. Evaluating the frequency of different diseases that may manifest as a mass in the right iliac fossa. Investigating a range of treatment approaches. Tracking the cases under study for continuous management and identification of potential complications.

MATERIALS AND METHODS

This research encompasses an analysis of 100 cases involving masses located in the right iliac fossa, admitted to Mahatma Gandhi Memorial Hospital in Warangal over a period extending from August 2022 to April 2024, totaling 20 months. The study involved the random and prospective selection of patients presenting with a mass in the right iliac fossa. The investigation was conducted over a 20-month timeframe, from August 2022 to April 2024, and included a total of 100 cases. Patients were chosen on a randomized and prospective basis, specifically those exhibiting a mass in the right iliac fossa. Exclusions were applied to female patients with conditions related to the uterus or adnexa, as well as those with masses originating from the anterior abdominal wall or bone in the affected area.

Each patient underwent comprehensive history-taking, general and localized examinations, along with

relevant investigations to ascertain the characteristics of the intra-abdominal mass. Clinical observations were meticulously documented in structured case sheets. A thorough history was gathered, symptoms were systematically recorded, and physical examinations were performed to evaluate the overall condition and vital signs of the patients. A rectal examination was conducted for all patients, with additional per vaginal examinations performed for female patients. Routine systemic examinations, including assessments of the respiratory and cardiovascular systems, were also carried out. Comprehensive and systematic investigations were conducted to confirm the diagnosis. Ethical approval was secured for the study. Patients received supportive care, which included addressing

dehydration, anemia, and nutritional deficiencies. Antihelminthic medications were provided when necessary, and suitable antibiotics were administered for respiratory and other infections. Bowel preparation was performed for cases that required exploratory laparotomy. Laparotomy was executed as required, allowing for a thorough intra-abdominal examination of all organs. Specific surgical procedures were carried out for each individual case. Postoperative management involved careful monitoring, including the maintenance of intake-output and vital signs charts, administration of antibiotics, analgesics, and sedatives as required, along with the timely removal of drains and sutures.

RESULTS

Table 1: Incidence of various conditions :

Sl.No.	Diagnosis	No. of Cases	Percentage
1	Appendicular mass	40	40
2	Appendicular abscess	14	14
3	Carcinoma of caecum	20	20
4	Ileocaecal tuberculosis	14	14
5	Psoas abscess	8	8
6	Others*	4	4

In my above study , RIF mass arises about half mostly from diseases of appendix in the form of Appendicular mass and abscess followed by Carcinoma of caecum and Ileocaecal TB.

Table 2 : Duration of symptoms :

Sl. No.	Diagnosis	No. of cases	2-30 D	1-3 M	3-6 M	> 6 M
1	Appendicular mass	40	38	2	-	-
2	Appendicular abscess	14	13	1	-	-
3	Carcinoma caecum	20	6	2	10	2
4	Ileocaecal tuberculosis	14	3	9	-	2
5	Psoas abscess	8	2	6	-	-
6	Others	4	2	1	-	1
	Total percentage	100%	66%	20%	6%	8%

D- days , M- months Most of the cases of RIF mass present early within a month , with the exception being patients with Ileocaecal TB presenting after 1 month and the patients with malignancies after 3 months

Approximately 40% of patients diagnosed with carcinoma of the caecum reported abdominal mass as a symptom, while in the remaining cases, the incidence of abdominal mass presentation was below 20%. In this investigation, 59% of patients with appendicular mass experienced fever, and 45% reported vomiting. Among those with appendicular abscess, 50% exhibited fever, while 30% experienced vomiting. Of the 14 cases of ileocaecal tuberculosis, 8 presented with fever, 3 with vomiting, and 8 with weight loss. In a cohort of 20 patients with carcinoma of the caecum, 8 reported occasional vomiting, and nearly all cases indicated a history of weight loss. Approximately 90% of cases exhibit tenderness in the abdomen, particularly in the right iliac fossa. In the

majority of cases involving caecal malignancies, the palpable mass is firm in consistency, whereas it tends to be soft in instances of appendicular abscess. Of all the cases of RIF mass management 64 % needed a surgical intervention immediately and were operated upon whereas the rest 36% were managed medically.

In approximately 40 cases of appendicular mass, 24 were treated using the Oschner-Sherren regimen, while the remaining 16 cases required surgical intervention following conservative management. Among the 24 cases treated with the Oschner-Sherren approach, 16 subsequently underwent interval appendectomy, while others either declined surgery or failed to maintain follow-up. Regarding the 20 cases of carcinoma of the cecum, there were 3 instances of recurrence, 2 cases presented with distant metastasis, and 3 cases had unresectable masses at the time of diagnosis, which were managed with palliative chemotherapy, while the remaining cases were addressed through surgical means Complications

during follow-up included wound infections, observed in 22 of the total operated cases, with appendicular abscesses constituting a significant portion. Mortality occurred in 6 cases. Patients diagnosed with intestinal tuberculosis and psoas cold abscesses were placed on antitubercular therapy. Additionally, chemotherapy was administered post-operatively for cases of colon carcinoma, including both post-operative patients and those receiving palliative chemotherapy due to metastasis.

DISCUSSION

This study examines 100 cases of masses located in the right iliac fossa, admitted to Mahatma Gandhi Memorial Hospital in Warangal from August 2022 to April 2024, covering a duration of 20 months. The most prevalent condition identified was appendicular mass, accounting for approximately 40% of the total cases. This condition predominantly affects individuals in their second decade of life, specifically those aged 21 to 30 years, and is more frequently observed in males than females. All patients reported experiencing pain in the right iliac fossa for less than one month, with nearly 80% also experiencing nausea and vomiting. Among the 40 cases, only one patient reported a palpable abdominal mass, while tenderness was noted in all patients.

Of these 40 cases, 24 were managed conservatively using the Ochsner-Sherren regimen, which included keeping the patient nil per oral, administering intravenous antibiotics, inserting a Ryles tube, providing intravenous fluids, and closely monitoring the patients. The remaining 16 patients required laparotomy with appendectomy due to the ineffectiveness of conservative treatment. In the 24 conservatively managed cases, interval appendectomy was performed in 16 cases six weeks after the initial episode, while the others either did not follow up or declined surgery. Histopathological examination of the appendiceal specimens revealed a majority of cases diagnosed with chronic appendicitis.

Although appendicitis is more commonly observed in individuals under 20 years of age, appendicular mass is also noted in the third decade of life. This may be attributed to a higher pain tolerance in older patients and the use of antibiotics from unqualified practitioners, which can mask symptoms and lead to delayed presentation when the condition worsens into an appendicular mass. Most cases of appendicular mass can be effectively managed conservatively using the Ochsner-Sherren regimen, while surgical intervention is warranted in cases where conservative management fails. Additionally, appendicular abscesses were identified in approximately 14 cases within this study, predominantly affecting the middle-aged to elderly population, aligning with the established understanding that appendicitis is less common in older individuals.

CONCLUSION

The highest prevalence of masses in the right iliac fossa was noted among patients in their 30s and 40s. A significant proportion of these patients came from low socio-economic backgrounds. The predominant symptoms reported included pain in the right iliac fossa, fever, vomiting, weight loss, and alterations in bowel habits. A limited number of cases presented with a prior history of a mass in the right iliac fossa. Tenderness was the primary clinical sign observed in the majority of these instances. Most cases of right iliac fossa masses were attributed to appendicular pathologies in the younger demographic, while in the older demographic, the diagnoses tended to lean towards malignancies, with ileocecal tuberculosis falling in between. Timely identification of clinical signs and precise investigations are essential for accurate diagnosis. Patients undergoing conservative management should be closely monitored for any indications necessitating surgical intervention, which should be conducted as promptly as possible, alongside regular follow-up to enhance patient outcomes.

REFERENCES

1. Adalla S.A. Appendiceal mass : Interval appendectomy 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. Bhansali S.K. : The challenge of abdominal tuberculosis in 310 cases. *US*, 1978 Feb-Mar; 65-76. 6) Crerand S., Feeley TM., Waldron RP et al : Colorectal carcinoma over 30 years at one hospital - No evidence for a shift to the right. *Int J Clorect Dis*, 1999 Nov; 6(4) : 184-7.