



INFLAMMATORY CAECAL MASS SECONDARY TO RUPTURED APPENDIX – A CASE REPORT

**Dr. Praneetha
Balijepalli**

MS General Surgery Institution: Department of General Surgery, Maharaja Institute of Medical Sciences, Nellimarla, Andhra Pradesh, India – 535217

**Dr. Gowthami
Boyapati**

MS General Surgery, Institution: Department of General Surgery, Maharaja Institute of Medical Sciences, Nellimarla, Andhra Pradesh, India – 535217

ABSTRACT

Inflammatory caecal mass is an uncommon surgical finding that often mimics carcinoma of the caecum both clinically and radiologically. It usually develops as a complication of appendicular pathology, especially a ruptured or perforated appendix with localized peritonitis. Differentiating between an inflammatory and malignant mass is challenging before surgery. Here, we report a case of a 46-year-old female who presented with right iliac fossa pain and vomiting. Ultrasonography revealed a ruptured appendix with localized collection. Intraoperatively, a caecal mass with ruptured appendix was identified, and segmental resection was performed. Histopathology revealed an inflammatory caecal mass without evidence of malignancy. The case emphasizes the diagnostic dilemma and the importance of histopathological confirmation in the management of caecal masses.

KEYWORDS : Inflammatory caecal mass, ruptured appendix, appendicular abscess, segmental resection, right iliac fossa mass

INTRODUCTION:

Inflammatory caecal mass is a rare but significant cause of right iliac fossa mass. It can closely mimic caecal carcinoma, presenting a diagnostic challenge to surgeons. The condition arises due to the extension of inflammation from a ruptured or perforated appendix into the caecal wall and surrounding structures. This results in thickening, fibrosis, and mass formation that can be mistaken for neoplasia on imaging studies. Accurate preoperative diagnosis is difficult because of overlapping clinical and radiological features. Therefore, intraoperative assessment and histopathological examination remain the gold standard for confirming the diagnosis. The following case highlights a rare presentation of inflammatory caecal mass secondary to ruptured appendix, managed successfully by segmental resection at Maharaja Institute of Medical Sciences, Nellimarla.

CASE REPORT:

A 46-year-old female, Mrs. Pushpavathi, presented to the Department of General Surgery, Maharaja Institute of Medical Sciences, with complaints of pain in the right iliac fossa for 2 days, associated with two episodes of non-bilious vomiting. There was no history of fever, urinary complaints, or altered bowel habits.

General Examination: The patient was conscious, oriented, afebrile, and hemodynamically stable.

Abdominal Examination: Tenderness and guarding were noted in the right iliac fossa, with mild fullness. No palpable lump was detected. Bowel sounds were present.

Investigations: Hemogram showed leukocytosis with neutrophilic predominance. Ultrasonography (USG) revealed ruptured appendix with localized collection in the right iliac fossa — suggestive of appendicular abscess. Other investigations were within normal limits.

After resuscitation with intravenous fluids, antibiotics, and analgesics, the patient was taken for surgery under general anesthesia.

Intraoperative Findings:

A dense inflammatory mass involving the caecum and appendix was found. The appendix was ruptured and adherent to the caecal wall. Localized pus collection and enlarged mesenteric lymph nodes were present. The caecal wall was thickened, edematous, and friable, making simple

appendectomy unsuitable. Hence, segmental resection of the caecum with involved appendix was performed.

Postoperative Course: The patient had an uneventful postoperative recovery. Oral fluids were started on postoperative day 3, and she was discharged on day 7 in good condition.

Histopathology (HPE): Sections from the resected specimen showed chronic inflammatory cell infiltration, fibrosis, and lymphoid hyperplasia. No evidence of dysplasia or malignancy was noted. Final diagnosis: Inflammatory caecal mass secondary to ruptured appendix.

DISCUSSION:

Inflammatory caecal mass is an uncommon condition that presents a diagnostic challenge due to its similarity to caecal carcinoma. The mass forms due to extension of infection and inflammation from an appendicular abscess or perforation into adjacent caecal tissue. The resultant fibrosis and thickening may simulate a neoplastic growth. The clinical presentation typically includes right lower quadrant pain, vomiting, fever, and occasionally a palpable mass. Radiologically, features such as caecal wall thickening, pericaecal inflammation, and localized abscess may be observed, but these findings are not specific. CT scan may show preserved mural stratification and adjacent fat stranding in inflammatory lesions, whereas malignant lesions often show irregular thickening and loss of mural layers. In many instances, definitive diagnosis can only be made intraoperatively or by histopathological examination.

Surgical management depends on intraoperative assessment. Appendectomy with drainage is suitable for localized inflammation or abscess, while segmental resection or right hemicolectomy is reserved for cases with necrotic or thickened caecal walls or suspicion of malignancy. In our patient, the presence of a ruptured appendix with unhealthy caecal wall warranted segmental resection. Histopathology confirmed inflammatory etiology, thus avoiding unnecessary radical surgery. Prompt surgical intervention with adequate antibiotic coverage and postoperative care ensures favorable outcomes.

CONCLUSION:

Inflammatory caecal mass should be considered in the differential diagnosis of right iliac fossa masses, particularly in cases associated with appendicular pathology. Its close

resemblance to carcinoma of the caecum makes preoperative diagnosis difficult. Surgical exploration and histopathological confirmation remain essential for accurate diagnosis and appropriate management. Early recognition and timely surgical intervention can result in excellent recovery and prevent complications.

Acknowledgement:

The author expresses sincere gratitude to the Department of General Surgery, Maharaja Institute of Medical Sciences, Nellimarla, for their valuable guidance and support in the management and documentation of this case.

REFERENCES:

1. De U, Ghosh S. Inflammatory caecal mass: A clinicopathological study. *Indian J Surg.* 2010;72(3):182–185.
2. Bhandarkar DS, et al. Inflammatory mass of the right iliac fossa. *Trop Gastroenterol.* 2001;22(1):38–40.
3. Zissin R, et al. CT findings of inflammatory conditions of the ileocecal region. *Br J Radiol.* 2001;74(884):1107–1114.
4. Nitecki S, et al. The fate of the appendiceal mass: Conservative versus surgical therapy. *Surgery.* 1993;114(4):781–784.
5. Ellis H, Mahadevan V. *Clinical Anatomy: A Revision and Applied Anatomy for Clinical Students.* 13th ed. Wiley-Blackwell; 2018.