

# Appendiceal Mucinous Neoplasm in a Young Male- A Case Study

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**Abstract:** *Low Grade Appendiceal Neoplasms (LAMN) are rare malignancies, accounting for less than 1% of gastro - intestinal neoplasms. LAMN is found in about 0.3% of appendectomy specimens. 8<sup>th</sup> AJCC cancer staging manual defines LAMN as a mucinous neoplasm with low grade cytology associated with obliteration of muscularis mucosa without overt features of infiltration.*

**Keywords:** Appendiceal Mucinous Neoplasm, LAMN (Low Grade Appendiceal Neoplasm), Appendectomy, Young Male Patient, Case Study

## 1. Purpose of the Article

This article aims to detail the diagnosis, treatment and implications of a rare case of Low Grade Appendiceal Mucinous Neoplasm (LAMN), particularly in younger patients, thereby enriching the existing literature and guiding future clinical practice.

## 2. Case Description

A 23 year old male patient with no known comorbidities presented at the OPD with complaint of right lower abdominal pain since 6 weeks.

The pain, acute in onset and colicky in nature, migrated from the umbilicus to the right lower abdomen, and was associated with nausea and multiple episodes of vomiting.

For the same complaint, patient was being managed conservatively elsewhere and was referred for elective appendectomy.

## 3. Examination Findings

### 3.1 Per Abdomen:

Soft, Right iliac fossa tenderness present on deep palpation; no guarding/ rigidity/ shifting dullness/ mass per abdomen/ rebound tenderness.

**Hernial orifices:** Normal

**Bowel Sounds:** Heard normally

**External genitalia:** Normal.

### 3.2 Investigation

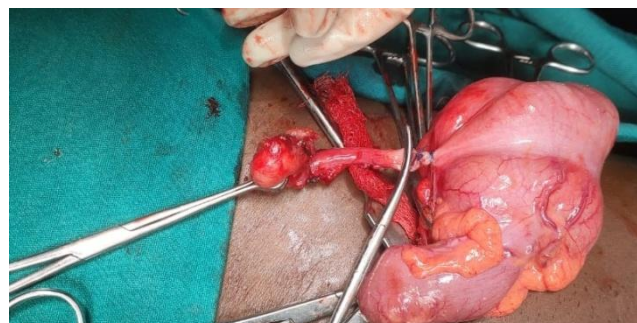
Abdominal CT scan showed a small, loculated collection (3 x 2.3 x 2cm) in right iliac fossa, adjacent to caecum (likely appendicular abscess)



### 3.3 Procedure

The patient was posted for open appendectomy under general anesthesia on 12/09/2023. McBurney's incision made, external oblique muscle cut and retracted, and peritoneum was opened. Appendix was located retroceccally, was inflamed with a bulge noted at tip.

Appendectomy was performed, thorough peritoneal lavage was given, and closure done. Specimen was sent for biopsy.





### 3.4 Histopathology Report



Low Grade Appendiceal Mucinous Neoplasm (LAMN) involving distal half of appendix; size= 2 x 1.7 x 1.5cm. Resected base - free of neoplasm. Pathological stage - pT4a (acellular mucin present on serosal surface). No mesoappendicular invasion.

### 3.5 Follow Up

Follow up colonoscopy 3 months post surgery along with CT scan of abdomen to look for recurrence. Yearly CT scan of abdomen after that for 3 years.

## 4. Discussion

LAMN (Low Grade Appendiceal Mucinous Neoplasms) are often asymptomatic, or may present with features of acute appendicitis, and rarely may present with features of obstruction or intussusception.

The most dreaded complication of LAMN is seeding of mucin into adjacent peritoneum, leading to pseudomyxoma peritonei.

LAMN larger than 6cm have a higher risk of malignant cells being present, appendiceal perforation and development of pseudomyxoma peritonei.

## 5. Conclusion

In conclusion, this case of LAMN in a young male patient highlights the need for heightened clinical suspicion and

comprehensive diagnostic approaches. It underscores the importance of ongoing research into the management and surveillance of this rare condition.

## References

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