

## Clinical Image

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# Appendiceal LAMN mimicking giant ovarian cystic lesion

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### Abstract

This report describes a rare case of a 74-year-old woman with a giant pelvic mass initially suspected to be of ovarian origin but later identified as a Low-Grade Appendiceal Mucinous Neoplasm (LAMN) with ovarian metastasis. The patient presented with compressing symptoms. A contrast-enhanced CT scan revealed a large cystic mass (21 x 15 x 19 cm) associated with the right ovary, compressing nearby structures, along with an appendiceal mucocele. Surgery via laparotomy included, adnexectomy with removal of pelvic mass, salpingectomy and appendectomy. Histopathological analysis confirmed Stage IVA LAMN. LAMNs are rare tumors, often invading through the appendiceal wall and leading to ovarian metastasis. Diagnosis can be challenging due to overlapping features with primary ovarian tumors.

**Keywords:** LAMN; Appendix; Ovary.

### Introduction

Herein is reported a rare case of a giant pelvic mass, initially thought to be ovarian, later confirmed as a Low-Grade Appendiceal Mucinous Neoplasm (LAMN) with ovarian metastasis.

### Case presentation

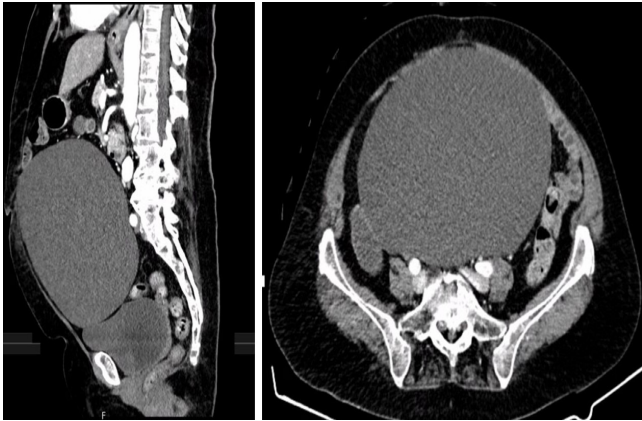
A 74-year-old female presented with a one-year history of progressive abdominal distension, postprandial bloating, anorexia, vomiting, and constipation. Examination revealed distension with a poorly defined mass occupying the entire abdominal cavity. Contrast-enhanced CT identified a 21 x 15 x 19 cm cystic intra-abdominal mass, compressing surrounding structures, suggesting a right ovarian cystadenoma. A mucocele of the appendix was also observed (Figure 1). The patient was submitted to laparotomy and a large pelvic mass and an appendiceal mucocele-like lesion were revealed. The mass was removed along with an adnexectomy, salpingectomy, and appendectomy (Figures 2 and 3). There were no intraoperative complications, including specimen rupture or mucin leak. The postoperative course was uneventful, and the patient was

discharged on day 5. Histopathological examination of the ileocecal appendix confirmed a ruptured LAMN with extraluminal mucin, and the ovary contained a 25 x 15 cm specimen almost entirely occupied by mucinous neoplasia. Based on pathology and staging guidelines, the diagnosis was Stage IVA LAMN [1]. The patient was referred for cytoreductive surgery and hyperthermic intraperitoneal chemotherapy.

### Discussion

LAMNs are rare, with an incidence rate of 0.7-1.7%, and are characterized by adenomatous alterations in the appendiceal mucosa. LAMNs usually invades through the appendiceal wall and ovarian infiltration is a well-documented occurrence, with ovarian metastases observed in half of these patients [1-3].

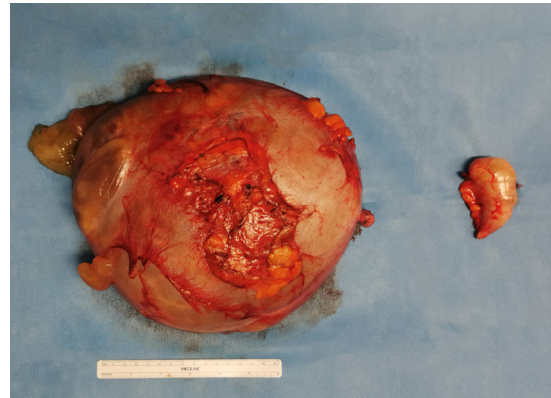
The symptoms may be nonspecific or related to mass effect and the diagnosis may be challenging, especially in female patients, as primary appendiceal and ovarian mucinous neoplasms often exhibit similar atypical clinical and imaging features [2-4].



**Figure 1:** CT-scan (axial and sagittal) revealing a 21 x 15 x 19 cm cystic mass extending from the pelvis to the kidneys, closely associated with the right ovary and compressing nearby structures, including the iliac vessels, right ureter, and bladder.



**Figure 2:** Intra operative image showing the ovarian cystic mass and the appendix with mucocele lesion.



**Figure 3:** Appendix and right ovarium after surgical excision.

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