

# Unexpected Giant Mucinous Cyst in a Young Patient: A Case to Remember

**Objective:** This case is reported due to the rarity of giant mucinous cysts in young females, highlighting its unusual presentation, massive size, and potential diagnostic and surgical challenges. Such cysts are often misdiagnosed or discovered late due to their slow growth and nonspecific symptoms. This case emphasizes the importance of early detection, appropriate imaging, and careful surgical management to preserve fertility and prevent complications like rupture or malignancy.

**Case Report:** A 24-year-old nulliparous female presented to the Accident & Emergency (A&E) department with complaints of progressive abdominal distension, severe abdominal pain, fever, and tachycardia. She reported noticing abdominal enlargement over the past six months, which she had attributed to weight gain, leading her to adopt strict dieting and exercise. However, she remained asymptomatic until the onset of acute symptoms.

**Clinical Examination:** On examination, her abdomen was markedly distended, firm, and tense, with a palpable mass extending up to the epigastric region. There was tenderness with guarding and rigidity, raising suspicion of an acute abdominal pathology.

**Investigations:** Urgent abdominal ultrasound and MRI confirmed the presence of a giant mucinous ovarian cyst. Tumour markers, including CA-125 and other relevant markers, were within normal limits. However, her C-reactive protein (CRP) was significantly elevated, indicating an inflammatory process. She was promptly started on intravenous antibiotics.

**Surgical Management:** Due to her worsening clinical condition, an emergency laparotomy was performed. Intraoperatively, a massive ovarian cyst containing approximately 4 litres of thick mucinous fluid was identified and removed along with the affected ovary. Peritoneal washings and an omental biopsy were also taken.

**Histopathology & Follow-Up:** Histological analysis confirmed a mucinous cyst with borderline changes. Her case was discussed in a multidisciplinary meeting (MDM), and she was referred to gynaecologic oncology for further follow-up and management.

**Discussion:** In young women presenting with progressive abdominal enlargement, ovarian masses should be considered in the differential diagnosis, even in the absence of significant symptoms. The involvement of a multidisciplinary team (MDM) in post-operative decision-making ensures comprehensive patient care, particularly when histology reveals borderline or malignant changes. Long-term follow-up with gynaecologic oncology is essential to monitor for recurrence or malignant transformation.

**Conclusion:** This case highlights the rare occurrence of a giant mucinous ovarian cyst in a young female, presenting with acute abdominal symptoms. The delayed recognition due to the patient's misinterpretation of abdominal distension as weight gain underscores the need for awareness and timely intervention in such cases.