# DELAYED DIAGNOSIS IN A MENTALLY MOTOR-RETARDED GIRL: A RARE CASE OF GIANT MUCINOUS CYSTADENOMA

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### **Abstract**

Objective: This presentation discusses the challenging case of a 15-year-old mentally motor-retarded (MMR) girl with a delayed diagnosis due to a misdiagnosis. Additionally, we highlight the rarity of mucinous cystadenomas in childhood, with only ten reported cases in the literature.

Case Report: We present a 15-year-old MMR girl who has been bedridden since birth. She visited the emergency department three times within two days with complaints of severe vomiting, restlessness, and abdominal swelling. Initially, she was misdiagnosed with constipation and sent home with incorrect treatment. An emergency abdominal CT scan revealed a 13x7x7 cm cystic lesion in the left ovary, filling the abdominal cavity (Figure 1a-e). Left salpingo-oophorectomy was performed, confirming a mucinous cystadenoma (Figure 2,3).

Conclusion: This complex case underscores the importance of considering ovarian masses in children with abdominal symptoms and the significance of timely imaging. Careful evaluation and early surgical intervention, ideally at centers equipped for frozen section examinations, are crucial when dealing with medically complex patients like those with MMR.

**Keywords:** Mucinous cystadenoma, mental motor retardation, abdominal pain, ovarian mass, pelvic mass.

#### 1. Introduction

Individuals with mental motor retardation may have difficulty in receiving a diagnosis and consequently obtaining appropriate treatment due to factors such as speech difficulties, masking of symptoms, and accompanying neurological or genetic problems. Being disabled affects not only the individual but also their family. This places the clinician at risk of not obtaining accurate medical history from a stressed family, potentially leading to misdiagnosis. On the other hand, adnexal masses account for 1-2% of childhood masses. Approximately 60-70% of these are of ovarian origin, and most of them are benign [1,2].

## 2. Case Report

This case presentation discusses a 15-year-old girl with mental motor retardation who has been bedridden since birth. The reason for the patient's admission was severe vomiting, restlessness, and abdominal distension, which had been ongoing for 3 days. What is particularly noteworthy is that the patient had presented to the pediatric emergency department with similar complaints one and two days before the current admission and had been mistakenly treated for constipation and subsequently discharged.

During the physical examination, the patient exhibited advanced scoliosis. In addition, spastic paralysis was observed in all extremities, and tenderness with guarding was noted in the abdominal

region. The patient was highly agitated. When these findings and the patient's ongoing condition were considered together, making a diagnosis became exceedingly challenging.

According to laboratory results, the patient had a high white blood cell count (21,960/mm<sup>3</sup>), elevated CRP levels (5.46 mg/L), normal hemoglobin levels (14.0 g/dL), adequate platelet count (296,000/mm<sup>3</sup>), and normal creatinine (0.85 mg/dL) levels. Tumor markers could not be assessed due to the urgency of the patient's condition.

The patient initially underwent an abdominal ultrasound; however, the origin of the mass filling the abdomen could not be determined. To identify the origin of the mass and any associated pathologies, if present, an abdominal computed tomography (CT) scan was performed before the operation. During emergency computed tomography scanning, a cystic lesion with a diameter of approximately 12 cm and multiple septa was detected in the left lower quadrant of the abdomen, along the midline (Figure 1a-d). This lesion was suspected to be of ovarian origin. The patient had scoliosis (Figure 1e). The patient was taken to emergency surgery due to the presentation of acute abdominal symptoms. During the operation, a cyst originating from the left ovary was removed, and since frozen section examination could not be performed under hospital conditions and the macroscopic appearance of the cyst raised suspicion of malignancy, the right ovary was of normal size and appearance (Figure 2). Left unilateral salpingo-oophorectomy was performed (Figure 3). No ascitic fluid was observed. Pathological examination reported the lesion as a mucinous cystadenoma.

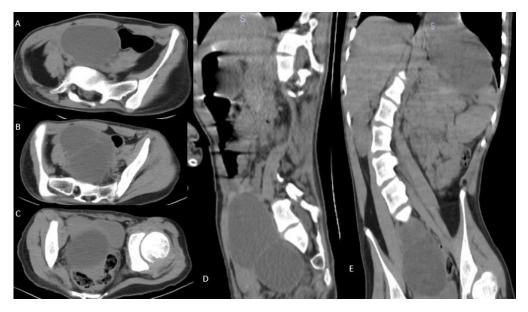


Figure 1. Abdominopelvic Computed Tomography Examination.

Figure 1A, 1B, 1C: In the axial section, in the lower quadrants of the abdominal midline, a 12 cm in diameter cystic lesion originating from the left ovary with multiple septations.

Figure 1D: In the sagittal section, the mass fills the abdomen.

Figure 1E: In the coronal section, a scoliotic appearance.



Figure 2. Intraoperative View of the Cyst of Left Ovarian Origin, Normal Appearance of the Right Ovary.



Figure 3: Left Salpingo-Oophorectomy Specimen Measuring 13x7x7 cm.

#### 3. Discussion

The evaluation of individuals with mental motor retardation is much more challenging compared to other patients. Apart from the difficulty of clinical examination and the lack of understandable expressions, the families of these individuals also experience certain psychological effects. These families often experience increased levels of stress and burnout syndrome due to the demanding physical and emotional aspects of caring for a disabled individual [3]. This, in turn, places a significant burden on the clinician, who often has no choice but to communicate with the family to obtain medical history.

The majority of adnexal masses in adolescents is ovarian cysts. Ovarian pathologies are observed in 2.6 out of 100,000 children, and malignant ovarian tumors constitute only 1% of all childhood cancers [4]. More than half of ovarian tumors in children originate from germ cells, with most being benign teratomas. Mucinous cystadenomas are rare but require pathological evaluation for diagnosis.

Symptoms and signs may not always be present, but when they do occur, the most common ones are nausea, vomiting, and bloating. Additionally, ovarian masses can cause torsion, leading to an acute abdominal presentation.

In the differential diagnosis of adnexal masses in adolescents, ovarian cysts, ovarian torsion, ovarian tumors, lymphoma, leukemia, and metastatic diseases should be considered.

There are very few reported cases of mucinous cystadenomas in childhood. In a study where Yazıcı et al. presented a mucinous cystadenoma in a 13-year-old girl, their review found that only 8 out of 623 ovarian masses in patients under 17 years of age were reported as mucinous cystadenomas [5].

The accepted approach for treatment is cystectomy, oophorectomy, or salpingo-oophorectomy if the mass appears benign [6]. Recurrence is rare in borderline cases. Furthermore, even in cases of malignant pathology, fertility-preserving surgery is often sufficient [7].

## 4. Conclusion

This presentation aims to increase clinical awareness for the recognition and management of such rare cases and similar cases. The limited expressiveness of individuals with mental motor retardation can complicate clinical diagnosis. Therefore, clinicians should not hesitate to use imaging methods. Moreover, the potential of large ovarian cysts to lead to an acute abdominal syndrome should not be underestimated, especially when patients present to the emergency department with acute abdominal pain. Abdominal ultrasound (USG) and computed tomography (CT) scans can detect large cysts, and the presence of giant ovarian cysts should always be kept in mind as they may require emergency surgical intervention.

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