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A Giant With A Gentle Whisper: The Story Of A Large Dermoid Cyst

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Abstract
Mature cystic teratoma is the most common benign ovarian germ cell tumor, commonly seen in women of reproductive age but less frequently reported in adolescents. Its presentation may be subtle, leading to delayed diagnosis. We report a case of a 17-year-old nulligravida female presenting with intermittent right iliac fossa pain for two months. Clinical examination revealed a large abdominopelvic mass corresponding to a 22-week-size uterus. Imaging studies suggested a large right ovarian neoplasm, and contrast-enhanced computed tomography was indicative of a mature cystic teratoma measuring 20 × 15 × 10 cm. The patient underwent exploratory laparotomy with right-sided oophorectomy due to the size of the tumor and absence of identifiable normal ovarian tissue. Histopathological examination confirmed the diagnosis. The postoperative course was uneventful. This case highlights the importance of early evaluation of persistent abdominal pain in adolescents.

Keywords: *Mature cystic teratoma, Dermoid Cyst, Ovarian germ cell tumor, Oopherectomy, Adolscent Gynaecology*

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I. Introduction

Germ cell tumors constitute approximately one-third of all ovarian tumors and are more commonly encountered in children and young women. While the majority of ovarian germ cell tumors are malignant, mature cystic teratoma, the most common germ cell tumor, is benign. It is also the most frequently encountered ovarian tumor in women of reproductive age and during pregnancy.

Mature cystic teratomas are composed of well-differentiated tissues derived from all three germ cell layers -ectoderm, mesoderm, and endoderm with ectodermal elements being the most predominant. Clinically, patients may present with subacute or chronic abdominal pain, often reflecting rapid tumor growth, capsular distension, hemorrhage, or necrosis within the tumor.

In adolescents, vague pelvic or abdominal symptoms are common and may be attributed to physiological ovulation or dysmenorrhea, leading to delayed diagnosis. This case highlights the diagnostic challenge and management of a large ovarian mature cystic teratoma in an adolescent patient.

II. Case Report

A 17-year-old nulligravida female presented with complaints of pain in the right iliac region for the past two months. The pain was intermittent, low-grade, and localized. She had attained menarche at 14 years of age and reported regular menstrual cycles occurring every 28 days, lasting for six days, with moderate flow and moderate dysmenorrhea. There was no history of urinary or gastrointestinal complaints, and no significant acute events related to the presenting symptoms. The patient had no known comorbidities.

On per abdominal examination, the abdomen was distended with unremarkable overlying skin. Palpation revealed a non-tender abdominal mass extending beyond the umbilicus, corresponding to approximately a 22-week-size uterus. There was no guarding, rigidity, or tenderness. Per speculum and per vaginal examinations were not performed in view of the patient's age and marital status.

Ultrasonography findings were suggestive of a neoplastic etiology, warranting further evaluation with contrast-enhanced CT (CECT) of the abdomen and pelvis. CECT revealed a well-defined neoplastic lesion measuring approximately 20 × 15 × 10 cm arising from the right ovary, likely representing a mature cystic teratoma (dermoid cyst). Table 1 shows Tumor Markers sent to rule out other tumors.

Table 1

	Result	Reference Range
AFP	1.8 ng/ml	0-8
Beta hCG	0.1 mIU/ml	0-5
Ca125	209 U/ml	0-35
Ca 19.9	2 U/ml	0-37
CEA	41.5 ng/ml	0-5
LDH	320 IU/L	235-450

After obtaining informed high-risk consent and completing preoperative evaluation, the patient was taken up for exploratory laparotomy. In view of the large size of the tumor and its indistinguishability from normal ovarian tissue on the right side, a right-sided oophorectomy was performed. The excised specimen was sent for histopathological examination.
The excised specimen is shown in Figure 1.

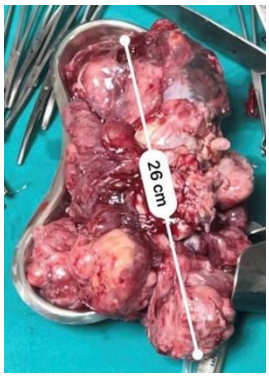

Figure 1

The patient tolerated the procedure well. Her postoperative period was uneventful, and she was discharged on postoperative day four after satisfactory wound inspection and dressing.

III. Discussion

Mature cystic teratomas arise from totipotent germ cells and contain well-differentiated tissues derived from one or more of the three germ layers, with ectodermal elements being the most predominant. Grossly, they are typically unilocular cysts filled with sebaceous material and hair; solid components such as teeth, cartilage, or bone may be present within the cyst wall. Clinically, these tumors are often asymptomatic and are incidentally detected. When symptoms occur, they usually result from increasing tumor size, leading to a sensation of abdominal fullness, pressure, or dull aching pain, as seen in the present case.
Figure 2, 3 and 4 demonstrate sebaceous material, hair and teeth present in the specimen respectively.

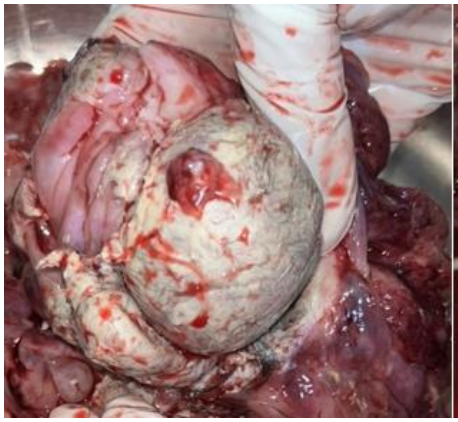
Figure 2

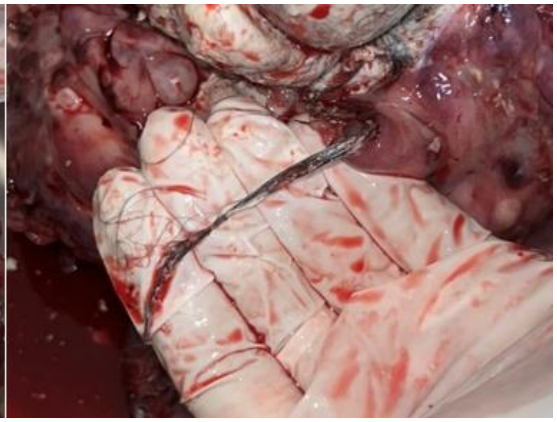
Figure 3

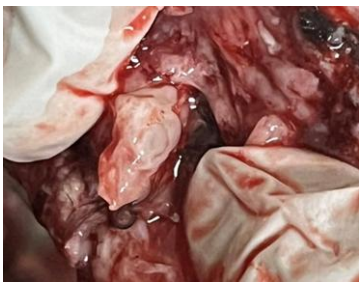

Figure 4

Laparoscopic cystectomy is considered the preferred surgical approach, especially in young patients, to preserve ovarian tissue. However, laparotomy is indicated in cases of large tumors, suspected complications such as torsion or rupture, or when malignancy cannot be excluded preoperatively. In the present case, the large size of the tumor and the inability to delineate normal ovarian tissue necessitated a right-sided oophorectomy via laparotomy.

IV. Conclusion

Mature cystic teratomas are usually benign and unilateral; however, they can attain a large size and pose a significant risk of complications such as ovarian torsion. Careful preoperative evaluation and individualized surgical planning are essential, particularly in adolescent patients where fertility preservation is a priority. Although ovarian cystectomy is the preferred surgical approach in most cases, oophorectomy may be unavoidable when the tumor is extensive and normal ovarian tissue cannot be preserved, as in the present case.

References

[1]. "Mature Cystic Teratoma Of The Ovary: An Overview Of Clinical And Imaging Findings" Radiographics. 2020;40(3): 775–795. DOI: 10.1148/Rg.2020190149

[2]. "Complications Of Ovarian Mature Cystic Teratomas: A Review" Annals Of Medicine And Surgery. 2021;67:102520. Open Access On Sciencedirect.