



Northern Light
HealthSM

Northern Light Health Eastern Maine Medical Center

Case Report: Bilateral Multicystic, Multiloculated Teratomas in Young Female

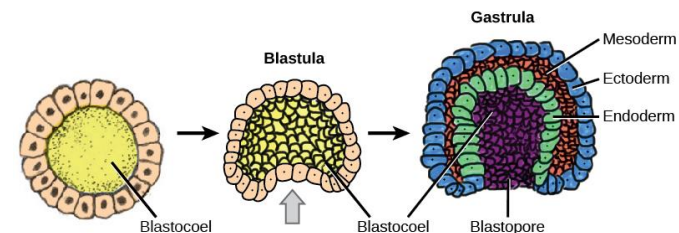
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Background

Ovarian teratomas are the most common germ cell neoplasm in females, originating from the germ cells within the ovaries. They are commonly found in adolescents or young adults. Teratomas are most often benign, but if left untreated can transform into a malignant teratoma.

- The incidence of adnexal masses is approximated to be about **2.6 patients/100,000** children, with the most common ovarian mass during childhood/young adulthood being an ovarian teratoma.
- Most teratomas end up being **benign**.
- Teratomas contain **multiple germ cell layers** leading to a complex tissue composition.
- Patients can present in a variety of ways based on the size, quality, and location of the mass.
- Presenting symptoms can range from menstrual abnormalities, hydronephrosis, signs of an acute abdomen, ovarian torsion, or hemorrhage to an asymptomatic, incidental diagnosis



Case Presentation

We report a case of bilateral multicystic, multiloculated teratomas in a young adult woman. Bilateral salpingo-oophorectomy was performed. Histopathology report confirmed mature cystic teratomas.

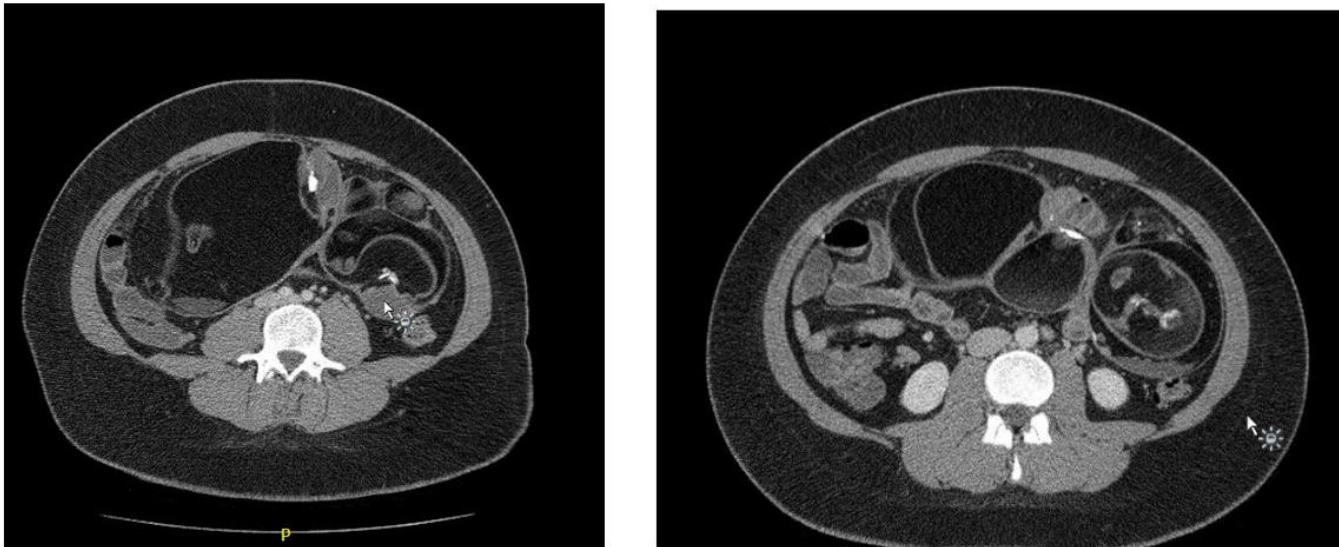


Fig. 1 Large bilateral ovarian lesions are seen containing fat, coarse calcifications and fat fluid levels. The right ovarian/adnexal dermoid measures at least 19.7 cm in greatest diameter, the left up to 13.5 cm. No free fluid. The uterus is displaced anteriorly by these large dermoid cysts.

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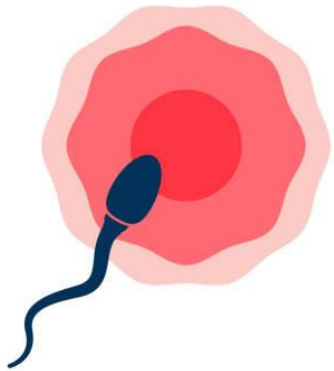
A young premenopausal white woman, with no prior gestations presented to a rural Maine emergency room with mid-epigastric pain, nausea, vomiting, and diarrhea on May 2, 2022.

- PMH: amenorrhea and irregular periods with history of missed periods for greater than a year. CT revealed bilateral dermoid cysts.
- Surgery was scheduled for May 20. She was consented for abdominal bilateral ovarian cystectomy, possible lysis of adhesions, and possible oophorectomy.
- Due to the severe involvement of tissue and inability to preserve either ovary, the right ovary was removed, leaving the left behind. Excising both would have induced menopause and the patient needed to be consented on these implications. She decided she would like the entire left cyst removed, even if that meant she would lose her entire remaining ovary.
- The second oophorectomy was performed on July 22.



Discussion

Mature ovarian cystic teratomas are benign tumors. The incidence of ovarian teratomas occurring bilaterally is 10%. Fortunately, recurrent ovarian teratomas are uncommon. It is important to follow up with patients following the removal for any signs of recurrence. In this case study, the patient's fertility was sacrificed to prevent recurrence.

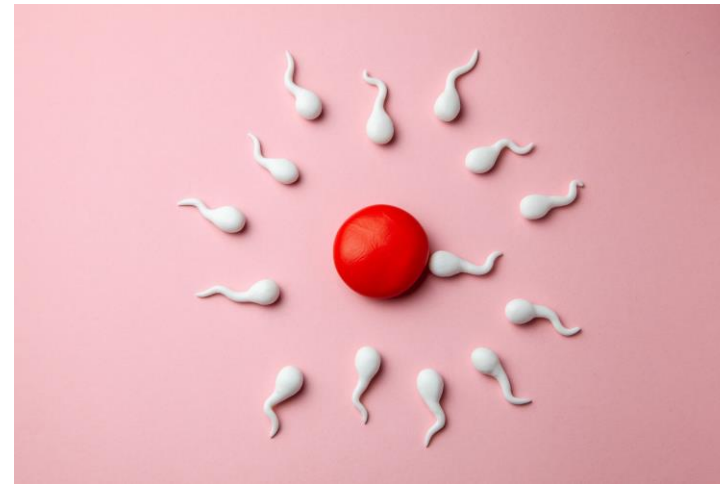


- Fayez *et al.* reported a case of a 19-year-old female who presented with a right ovarian torsion. Histopathology showed skin, neural tissue, respiratory tissue, and lobules of cartilage.
- Chang and Lin reported on a 20-year-old woman who was found to have recurrent, right ovarian teratomas, with elevated CA-125 levels. Pathology showed bilateral, mature cystic teratomas containing sebaceous, keratinous, and hair shaft material. For younger women specifically, laparoscopic management is more successful in preserving fertility.
- *Dittrich et al.* completed a retrospective study in which females with malignant disease who wanted to preserve their fertility underwent ovarian stimulation with transvaginal oocyte retrieval. Mature oocytes were frozen and will be able to be utilized if/when the patient would like to become pregnant.

Conclusion

Ovarian tumors should be included in the list of differentials when a young female presents with abdominal pain or GI symptoms. The masses can often be asymptomatic or with non-specific symptoms. Surgery is usually indicated in the treatment of teratomas and it should be done as soon as safely possible to prevent malignant transformation.

- As we advance healthcare, a multidisciplinary team can be implemented to utilize specialize techniques in fertility preservation.



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IRB Information

IRB # 1222-15; Bilateral Multicystic, Multioculated Teratomas in 19-Year -Old Female (EMMC)

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