

Teeth, and Hair, and Sebum, Oh My! A Case of Bilateral Large Ovarian Teratomas



Alexander Eddy, M.S., Shelby Brown, D.O., & Tschantre Dorsett, M.D.

INTRODUCTION

An ovarian teratoma is an ovarian germ cell tumor that can be classified as either mature (benign) or immature (malignant). Mature teratomas (also known as dermoid cysts) can contain hair follicles, adipose tissue, glial tissue, and nervous tissue.¹ They can reach massive sizes. Immature teratomas are fortunately rarer and generally don't contain mature tissue.

Abdominal pain is the most common presentation of ovarian teratomas in general.² On average, patients are 33 years of age by the time the tumor is found and removed.²

Approximately 10-15% of ovarian teratomas present bilaterally.^{2,3} A relatively common complication with ovarian teratomas is ovarian torsion, which occurs at a rate of approximately 5%.² Complete surgical resection is protective against tumor recurrence.⁴



CASE PRESENTATION

Patient Presentation: A 45-year-old nulligravida woman presented to the clinic with a chief complaint of abdominal pain and pressure as well as dyspareunia. She also noted a 4-month history of abnormal, heavier periods. Past medical history was unremarkable. Social history was significant for a 30-pack-year smoking history, binge drinking, and methamphetamine use. Family history was notable for ovarian cancer in her mother.

Labs/Imaging: Tumor markers were within normal range. Ultrasound showed an enlarged uterus (13.2x7.9x8.6 cm) with a thickened endometrium (2.66 cm). The left ovary was enlarged (9.7x9.4x6.5 cm), and the right ovary was even larger than the left (11.5x7.8x11.3 cm).

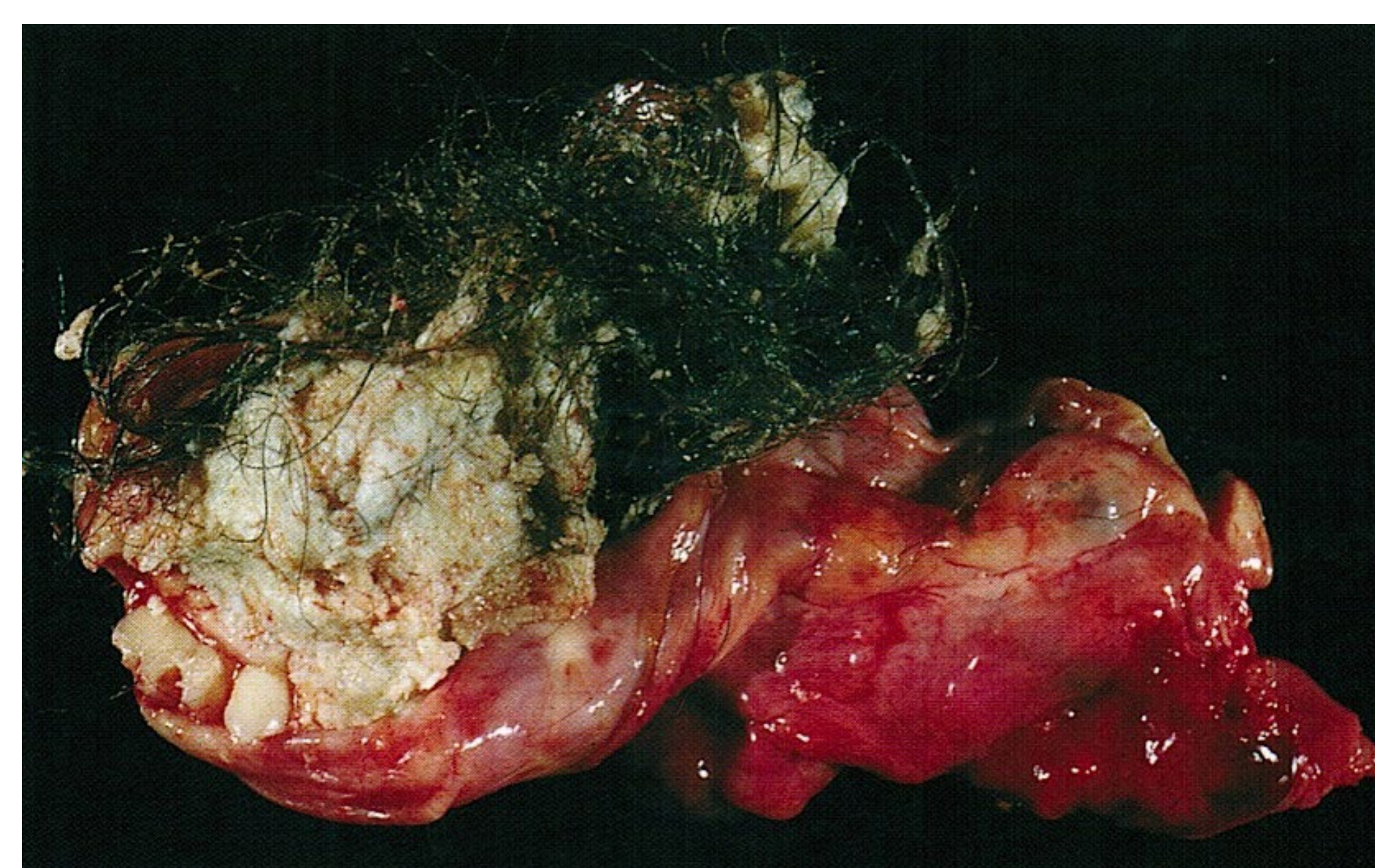
Intra-op Findings: The patient underwent a total laparoscopic hysterectomy with bilateral salpingo-oophorectomy. The uterus, right ovary, and left ovary were too large to be evacuated through the vagina, as is standard protocol, so they were cut in pieces. Fragmentation of each ovary yielded tan-brown hair, over one dozen teeth, and large amounts of sebaceous fluid.

Pathology Report: Bilateral ovarian dermoid cysts. No endometrial, cervical, tubal, or ovarian malignancy.

Recovery: The patient had an uneventful post-op recovery, and she admitted to resolution of her previous pain at two-week follow-up.



<https://www.sciencedirect.com/topics/nursing-and-health-professions/ovary-teratoma>



<https://www.pathologyoutlines.com/topic/ovarytumorteratoma.html>



<https://radiopaedia.org/articles/mature-cystic-ovarian-teratoma-1>

Note: Due to delay in patient's consent to the release of de-identified surgical images, we were unable to provide them here. Instead, we include representative images of mature ovarian teratomas.

DISCUSSION

The patient's mother had died of ovarian cancer at the age of 71. The type of ovarian cancer was unknown to the patient. The patient's teratomas were found to be benign. Approximately 1% of mature teratomas do undergo malignant transformation.⁵ This could possibly have happened if the patient had delayed surgery. However, whether this is what happened to her mother is unlikely, as the prevalence of familial ovarian teratomas is thought to be extremely rare.⁶ Finally, it is unknown whether the patient's social history could have increased the chances of her teratoma undergoing malignant transformation, given sufficient time. Some suggest that exposure to a carcinogenic environment could cause such a transformation.^{2,5}

REFERENCES

1. Devoize, L, Collangettes, D, Le Bouëdec, G, Mishellany, F, Orliaguet, T, Dallel, R, Baudet-Pommel, M. Giant mature ovarian cystic teratoma including more than 300 teeth. *Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology and Endodontology*. 2008;105(3):e76-e79.
2. Rim, S, Kim, S, Choi, H. Malignant transformation of ovarian mature cystic teratoma. *International Journal of Gynecologic Cancer*. 2006;16:140-144.
3. Chang, CF, Lin, CK. A case of recurrent, bilateral ovarian mature teratoma in a young woman. *BMC Women's Health*. 2014;14(57). <https://doi.org/10.1186/1472-6874-14-57>
4. Terenziani, M, D'Angelo, P, Inserra, A, Boldrini, R, Bisogno, G, Babbo, GL, Conte, M, Dall' Igna, P, De Pasquale, MD, Indolfi, P, Piva, L, Riccipetoni, G, Siracusa, F, Spreafico, F, Tamaro, P, Cecchetto, G. Mature and immature teratoma: A report from the second Italian pediatric study. *Pediatr Blood Cancer*. 2015;62(7):1202-1208. <https://doi.org/10.1002/pbc.25423>
5. Hackethal, A, Brueggmann, D, Bohlmann, MK, Franke, FE, Tinneberg, H, Münstedt, K. Squamous-cell carcinoma in mature cystic teratoma of the ovary: systematic review and analysis of published data. *The Lancet Oncology*. 2008;9(12): 1173-1180. [https://doi.org/10.1016/S1470-2045\(08\)70306-1](https://doi.org/10.1016/S1470-2045(08)70306-1).
6. Braungart, S, McCullagh, M. Management of Familial Ovarian Teratoma: The Need for Guidance. *European J Pediatr Surg Rep*. 2016;4(1):31-33. doi: 10.1055/s-0036-1593832.