

Rare Case of a Large Monodermal Ovarian Teratoma Managed with Laparoscopic Salpingo-Oophorectomy

Mr Ahmed Hassaan¹, Dr Lena Wragg¹ Ms Rosol Hamid¹

1. Croydon Health Services NHS Trust.



Introduction:

- Mature cystic teratomas (dermoid cysts) are among the most common ovarian tumours¹.
- Monodermal teratomas are a rare subtype, which originate from a single germ layer, accounting for only 2-3% of mature teratomas. The ovary is the commonest site of occurrence^{1,2}.
- We present a case that highlights the management of a rare large monodermal teratoma in a patient with concurrent gallbladder pathology, emphasizing multidisciplinary care and surgical prioritization.

Learning points:

1. Multidisciplinary surgical planning is critical to achieving optimal outcomes.
2. Monodermal teratomas should remain part of the differential diagnosis for large ovarian cysts, with thorough histopathological examination to confirm the diagnosis.

Presentation: 45-year-old female presented with abdominal pain and was admitted under the general surgical team at a district general hospital.

Initial diagnosis: acute cholecystitis secondary to gallstones.

Imaging: Incidental finding of a 12 cm right ovarian cyst. MRI reported as a dermoid cyst containing fat, calcified components, and a fluid level. The left ovary and uterus were unremarkable except for small fibroids.

MDT discussion: General surgeons recommended postponing cholecystectomy until after conservative management and recovery. Gynaecology advised, due to cyst size, increased risk of torsion and rupture.

Management: Laparoscopic right salpingo-oophorectomy was prioritised and performed.

Histopathology:

- Confirmed a **monodermal teratoma** characterized by squamous epithelium, sebaceous glands, adipose tissue, and apocrine glands.
- No immature elements or malignancy were identified. The fallopian tube was free of malignancy and serous tubal intraepithelial carcinoma.

References:

1. Gershenson DM, Pappo AS, Garcia RL. Ovarian germ cell tumors: Pathology, epidemiology, clinical manifestations, and diagnosis. Uptodate R. 2019.
2. He LY, Li W. Monodermal teratoma: Three case reports and review of literature. World Journal of Clinical Cases. 2024 Aug 6;12(22):5168.

Discussion:

- Monodermal teratomas are rare, particularly when presenting as large cysts.
- This case underscores the importance of multidisciplinary coordination to optimize patient care.
- Delaying the cholecystectomy allowed medical stabilization while addressing the more immediate risk posed by the ovarian cyst.
- Laparoscopic surgery proved effective, demonstrating that large cysts can be safely managed with minimally invasive techniques
- This case highlights the challenges of managing rare ovarian tumors alongside concurrent medical conditions.