

Case summary

Patient's profile: A 25-year-old Thai female, PARA 1001 with no underlying disease, presented with palpable abdominal mass for 1 month PTA. 6 months PTA (in June 2024), the patient went to hospital with acute colicky abdominal pain. She underwent emergency explored laparotomy. The surgical finding revealed a twisted gangrenous Rt. Ovarian cyst 15 cm, A Rt. Salpingo-oophorectomy was performed. Her pathologic report indicated the mature cystic teratoma of Rt. Ovary with diffused hemorrhagic necrosis. The abdominal examination revealed an abdomen mass approximately 20 cm in size, found on the Rt.-sided of the abdomen, adjacent to the liver with firm consistency, fixed in position and features a smooth surface and no tenderness present. Her pelvic examination was unremarkable. CTWA showed an enlarged liver with large size multiple septate cystic mass lesion at S4 extended inferiorly beyond liver capsule. The mass is about 21 x 16 x 22 cm with multiple foci of calcification inside the mass.

Impression: Abdominal mass; most likely teratoma

Operation: Explored laparotomy with debulking abdominal tumor with biopsy of peritoneal nodules

The final pathologic diagnosis: Immature teratoma grade 3 with Gliomatosis peritonei; suspected from previously resected Rt. Ovary with metastatic spread to the liver.

Adjuvant treatment: Chemotherapy with BEP regimen for 4 cycles, then evaluation for the role of second operation. Her latest tumor markers (AFP, LDH) were returning to normal level.

What we learn from this case:

- Immature teratoma, it's rare ovarian tumor but accounting for 10-20% of ovarian tumor in woman age under 20 years.
- Recurrent of Immature teratoma is rare, and recurrent from mature teratoma is extremely rare and uncommon. Other rare events of teratoma were reported, for example Growing teratoma syndrome, Parasitic dermoid cyst and Extragenadal primary teratoma e.g. hepatic teratoma.
- Most teratoma have a good response to adjuvant chemotherapy. The preferred regimen was BEP; necessary for all immature teratoma except Stage I, Grade 1.
- Misdiagnosis of Ovarian immature teratoma may result from specimen collection or sampling errors.

