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CASE IMAGE

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Rare giant ovarian thecoma presented as atypical/incomplete Meigs' syndrome: A case image report

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Key Clinical Message

We present a 39-centimeter thecoma with ascites and elevated Ca-125 values which is compatible with an atypical/incomplete Meigs' syndrome. Giant ovarian masses with elevated Ca-125 values and ascites are an alarming combination, although Gynecologists should be aware that there are also benign entities that mimic advanced stage ovarian cancer.

KEYWORDS

ascites, Meigs' syndrome, sex cord-stromal tumors, Thecoma

1 | CASE IMAGE PRESENTATION

Thecomas are rare sex cord-stromal tumors with an incidence of approximately 0.5%–1% of all ovarian tumors. These mostly benign tumors are typically unilateral but there are reported cases of bilateral disease. Thecomas usually range in size from 5 to 10 cm. In a recent case series published in the literature, the biggest reported thecoma was 22.5 cm.[1]

We present a case image of a 62-year-old P2G2 woman with a giant ovarian thecoma. The patient was presented to our emergency outpatient clinic complaining of abdominal bloating and pain over the last 6 months. No other symptoms were reported. Clinical examination revealed an enlarged abdominal mass extended up to the xyphoid process. Her medical history included hypothyroidism and dyslipidemia. Measured circumference of the abdomen was 149 cm. Vaginal

Ioannis S. Pateras, Nektarios Koufopoulos have contributed equally to this work.

examination revealed a palpable mass. Blood tests were all in normal range except for Ca-125 which was 407 U/mL. The sonographic examination revealed a pelvic multilocular lesion and ascites and the CT-scan illustrated a giant multilocular ovarian mass with dimensions of 39 × 29 × 22 cm (Figure 1). A laparotomy was performed with a middle line incision revealing a distinct ovarian mass of the right adnexa with dimensions of 38 × 30 × 26 cm (Figure 2A,B) and the presence of free peritoneal fluid. Cytological examination of the ascites was negative for malignancy. A right adnexectomy was performed and the mass was sent for frozen cut biopsy which was also negative for malignancy. The surgery was completed with hysterectomy and left salpingo-oophorectomy. Histological evaluation revealed the presence of an ovarian stromal tumor with diffuse growth and areas with cystic degeneration (Figure 3A). Tumor cells did not exhibit nuclear atypia and mitotic activity was minimal. The reticulin staining was preserved (Figure 3B). Tumor cells exhibited positive immunostaining for inhibin, calretinin and WT-1, whereas CD10 immunostaining was negative (Figure 3C–F). B-catenin staining was membranous. These features favored the diagnosis of thecoma. The postoperative course of the patient was uneventful, and she was discharged on the third postoperative day. On her follow-up assessment, Ca-125 values were normalized and there was no ascites present.

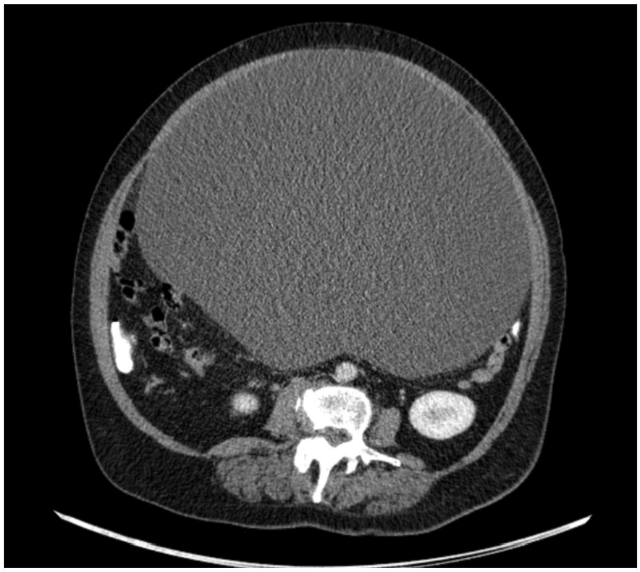

FIGURE 1 Computerized tomography scan image of the ovarian mass.

Thecomas are rare benign sex cord-stromal tumors. The presence of a 39-cm thecoma is even more rare.[1] Our patient had also ascites and elevated Ca-125 values, pointing to an advanced stage ovarian cancer. Both ascites and elevated Ca-125 values resolved after surgery. These findings are compatible with an atypical/incomplete Meigs' syndrome.[2] The triad of Meigs' syndrome include a benign ovarian tumor, ascites, pleural effusion and the resolution of both ascites and pleural effusion after the excision of the tumor.[2] Our case did not have pleural effusion, but all the other characteristic findings were present. Moreover, our case had a thecoma which is an extremely rare presentation of Meigs' syndrome, since most cases are associated with fibromas and cystadenomas.[3] Giant ovarian masses with elevated Ca-125 values and ascites are an alarming combination, but Gynecologist should be aware that there are also benign entities that mimic advanced stage ovarian cancer.

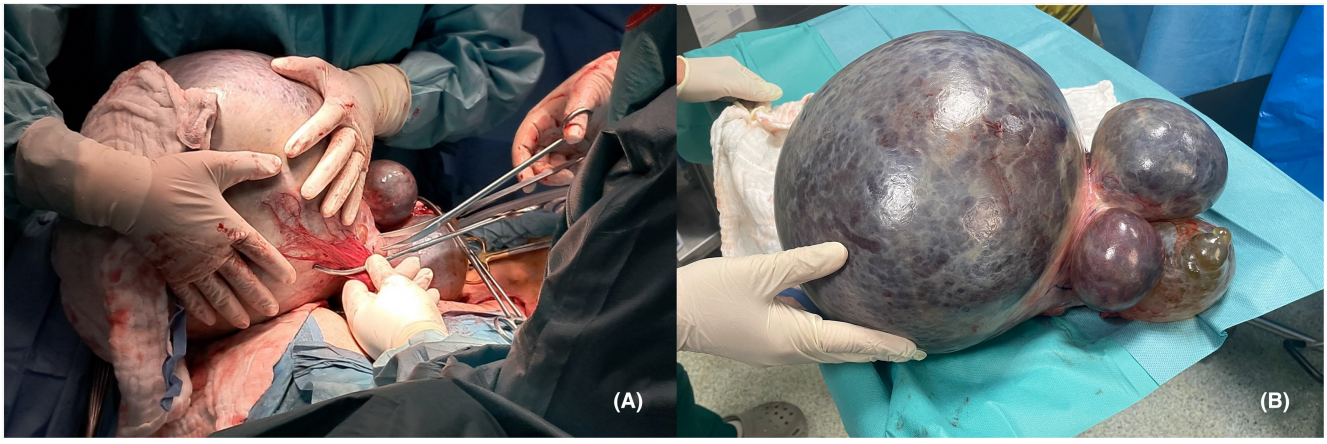

FIGURE 2 (A) Intraoperative excision of the right ovarian mass. (B) The specimen of the right adnexectomy.

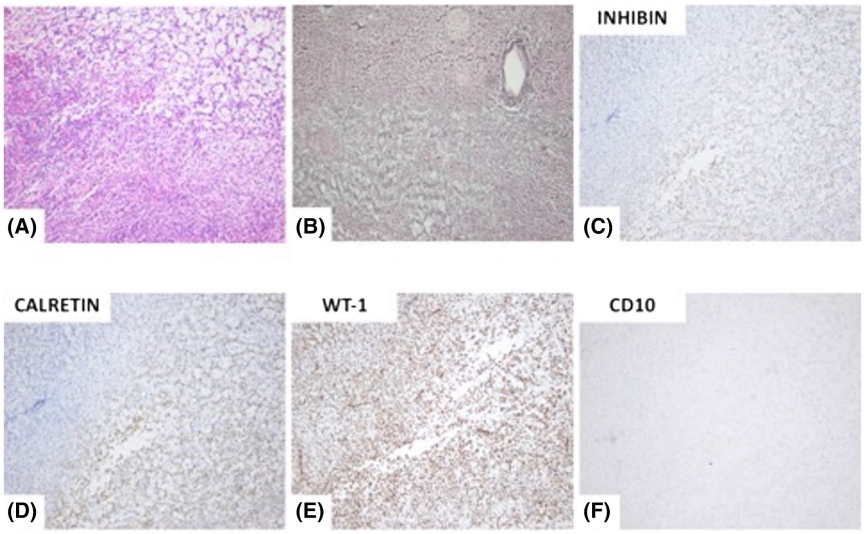

FIGURE 3 (A) Histologic evaluation revealed a densely cellular area which transitions abruptly to areas of microcystic change. Minimal nuclear atypia and absence of mitotic activity was observed. (B) The reticulin network is preserved. Tumor cells exhibited positive immunostaining for inhibin (C), calretinin (D) and WT-1 (E), whereas CD10 immunostaining was negative (F). Magnification ×100.

AUTHOR CONTRIBUTIONS

Anastasios Potiris: Conceptualization; writing – original draft. **Ioannis S. Pateras:** Validation; writing – original draft. **Nektarios Koufopoulos:** Validation; writing – original draft. **Menelaos G. Samaras:** Validation; writing – original draft. **Spyridon Topis:** Visualization; writing – original draft. **Maria-Gesthimani Chousmekeridou:** Investigation; writing – review and editing. **Athanasios Zikopoulos:** Validation; writing – review and editing. **Ekaterini Domali:** Supervision; writing – review and editing. **Peter Drakakis:** Supervision; writing – review and editing. **Sofoklis Stavros:** Project administration; writing – review and editing.

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CONFLICT OF INTEREST STATEMENT

The authors state that they have no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ETHICS STATEMENT

The study was conducted in accordance with the World Medical Association Declaration of Helsinki. The patient has given her written informed consent to publish the case (including the publication of images obtained).

CONSENT

Written informed consent was obtained from the patient to publish this report in accordance with the journal's patient consent policy.

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