Ultrasound, macroscopic and histological features of serous epithelial ovarian carcinomas

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Biography: Dott.ssa Maria Cristina Moruzzi is a gynecologist of Fondazione Policlinico Universitario Agostino Gemelli, IRCCS, in Rome. She is particularly involved in clinical research in ovarian cancer and ultrasound.

ABSTRACT

We present a video showing two cases of serous epithelial ovarian carcinomas. The first video shows clinical, ultrasound, macroscopic, and histological features of a patient with high grade serous ovarian carcinoma. The second video presents clinical, ultrasound, macroscopic, and histological features of a patient with low grade serous ovarian carcinoma.

SUMMARY

The objective of Video 1 is to present two cases of serous epithelial ovarian carcinomas, examined at the Gynecologic Oncology Unit of the Fondazione Policlinico Universitario Agostino Gemelli, IRCCS, Rome, Italy.

The first case is a 51-year-old patient with a family history of breast cancer (mother), referred to our center for bilateral adenexal masses detected during ultrasound examination performed in another hospital for pelvic pain. Serum levels of oncological markers were: CA125 423.6 U/mL (0–35 U/mL), CA19.9 8 U/mL (0–37 U/mL), and CA15.3 15 U/mL (0–32.5 U/mL). Both transabdominal and transvaginal ultrasound examinations were performed at our center. Transvaginal ultrasound examination showed a right multilocular solid tumor measuring 56×55×50 mm, with anechoic cystic content, a left solid tumor 42×27×34 mm in size, with internal cystic areas and an external irregular wall, and pelvic carcinomatosis. Both ovarian masses showed moderate...
vascularization at color Doppler examination. At transabdominal ultrasound examination, ascites, omental cake, and abdominal carcinomatosis were described (Figure 1). We applied the IOTA ADNEX model1 on the solid mass—the left ovarian lesion. IOTA ADNEX showed an increased risk of malignancy, with the highest relative risk for stage II–IV ovarian cancer (link to the IOTA ADNEX model calculator: https://www.iotagroup.org/sites/default/files/adnexmodel/IOTA-ADNEXmodel.html). Moreover, the tumor was classified as O-RADS 5.2

At laparoscopy, ultrasound findings were confirmed. An intraoperative frozen section of the right ovarian mass was positive for high grade serous ovarian carcinoma. A debulking surgery was performed with residual tumor 0. The macroscopic assessment of the ovarian masses confirmed bilateral solid cystic tumors.3 The final histology report was positive for low grade serous ovarian carcinoma.4 The patient underwent six cycles of adjuvant paclitaxel/carboplatin chemotherapy. Moreover, the possibility of maintenance hormonal therapy was discussed.

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