

A Case of Endometrioid Adenocarcinoma Resembling Sex Cord–Stromal Tumor of the Ovary with Concomitant Stromal Hyperthecosis

Mikiko AOKI¹⁾, Sumie NAKAMURA²⁾, Kyoko SHIROTA²⁾,
Hiroshi IWASAKI¹⁾, Tatsuhiko KAWARABAYASHI²⁾, Shingo MIYAMOTO²⁾
and Kazuki NABESHIMA¹⁾

¹⁾ *Department of Pathology, Faculty of Medicine, Fukuoka University*

²⁾ *Department of Obstetrics and Gynecology, Faculty of Medicine, Fukuoka University*

Abstract : A 55-year-old Japanese woman with irregular vaginal bleeding underwent a right salpingo-oophorectomy for right ovarian tumor. Preoperative laboratory tests were normal except for elevated serum estradiol level (120 pg/ml), which decreased after the surgery. Intraoperative frozen sections suggested granulosa cell tumor based on presence of lobulated nests of tumor cells and small follicular structures, together with Call-Exner-like bodies. Postoperative examination of formalin-fixed paraffin-embedded sections showed two different-looking portions, solid and tubular portions, divided by thin fibrous septa. The former was sex cord-stromal tumor-like, and the latter endometrioid adenocarcinoma-like. However, tumor cells of both portions were positive for epithelial membrane antigen, cytokeratins, vimentin, estrogen receptor, and progesterone receptor, but negative for α -inhibin, calretinin, CD56 and cytokeratin 20, indicating endometrioid adenocarcinoma resembling sex cord-stromal tumor. This variant of endometrioid adenocarcinoma is uncommon, and was accompanied by stromal hyperthecosis in our case, which was responsible for the high serum estradiol level and irregular vaginal bleeding. Diagnosis in frozen sections is important, but accurate diagnosis is sometimes difficult and needs awareness of the tumor, together with multiple sampling and use of intraoperative cytologic preparations. A combination of this variant and stromal hyperthecosis with estrogenic manifestations should be considered for the differential diagnosis.

Key words : Ovary, Endometrioid adenocarcinoma, Sex cord-stromal tumor, Granulosa cell tumor, Hyperthecosis