Ovarian Sertoli-Leydig cell tumor with hyperestrogenism in a postmenopausal woman: A case report and review of the literature

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Abstract

【Abstract】Ovarian Sertoli-Leydig cell tumors (SLCTs) are extremely rare ovarian sex cord-stromal tumors, predominantly secreting testosterone and occasionally manifesting with elevated estrogen levels, such as abnormal uterine or postmenopausal bleeding. This report details a 57-year-old postmenopausal woman with vaginal bleeding. Laboratory findings indicated mildly suppressed follicle-stimulating hormone and elevated estradiol. Female tumor markers showed no abnormalities. The transvaginal ultrasound revealed thickened endometrial lining accompanied by cystic echoes, cystic echoes in the left ovary, and no definitive mass observed in the right ovary. Postoperative pathology revealed atypical endometrial hyperplasia, a serous cystadenoma in the left ovary, and a moderately differentiated SLCT in the right ovary. Surgical approach: Total hysterectomy, bilateral adnexectomy, and omentectomy were performed laparoscopically. Five months postoperatively, the patient's follicle-stimulating hormone levels were significantly elevated, and estradiol levels markedly decreased. Transvaginal ultrasound showed no occupying lesions in the pelvic cavity. This case underlines the importance of recognizing elevated hormone levels as potential indicators of SLCTs when imaging is inconclusive, highlighting the need for early detection and treatment.

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