A 51-year-old woman with menometrorrhagia

CLINICAL HISTORY

A 51-year-old woman presented with menometrorrhagia. Other than this, the woman’s medical history was unremarkable. She did not have any other endocrine abnormalities such as virilization. Physical examination revealed leiomyomas in the uterine corpus which is confirmed by ultrasonography. She underwent total abdominal hysterectomy and bilateral salpingo-oophorectomy. The postoperative course (17 months) was unremarkable, steroid hormone levels and tumor markers were within the normal range.

Gross examination of the specimen showed multiple submucous and intramural leiomyomas in uterine corpus. The left ovarian enlargement was also detected. On cut sections of the left ovary, there was a 2x1.5x1.5 cm tan-yellow solid mass. The mass appeared well-demarcated from the surrounding normal ovarian tissue and had lobulated contours (Figure 1). Microscopically, the neoplasm was composed of Sertoli and Leydig cells. The Sertoli cells were arranged in a tubular pattern and had elongated nuclei with mild pleomorphism and inconspicuous nucleoli and mitotic figures. There were nests of mature Leydig cells in the intervening stroma (Figure 2, hematoxylin-eosin, x200). Rare Reinke crystals were identified within the Leydig cells (Figure 3, trichrome, x400). Heterologous elements and retiform pattern were not present. The neoplastic Sertoli and Leydig cells were positive for alpha-inhibin in immunohistochemical analysis (Figure 4).
PATHOLOGIC DIAGNOSIS

Sertoli-Leydig cell tumor, well-differentiated subtype

DISCUSSION

Sertoli-Leydig cell tumors were previously named “arrhenoblastoma” or “androblastoma”. Sertoli-Leydig Cell Tumors (SLCT) account for less than 0.5% of all ovarian tumors. They occur in all age groups but are encountered most often in women younger than 30 years of age (1). The steroidogenic profile of these tumors is variable. Patients with SLCT have hyperandrogenic symptoms; abnormal menstrual periods (oligo-amenorrhea), loss of female secondary sex characteristics, progressive masculinization and erythrocytosis or hyperestrogenic manifestations. Fifty percent of patients with SLCT have no endocrine manifestations.

SLCTs are generally unilateral. The size of the tumors can range from microscopic foci to large masses (0.4-35 cm in diameter, mean 13 cm) (1,2). They can be solid or cystic.

SLCT are subdivided into 5 subtypes based on the degree of the histologic differentiation by The World Health Organization: well-differentiated, intermediate differentiated, poorly differentiated, retiform and mixed (1). The prognosis of these tumors depends on the degree of differentiation and the stage, essentially. The well-differentiated tumors are almost always clinically benign (3).

References