

Rare Case of Ovarian Steroid Cell Tumor: Fertility Preserving Treatment and Management

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Background

Steroid cell tumors of the ovary are rare sex-cord tumors, accounting for <0.1% of ovarian tumors. Common presentations include hyperandrogenic symptoms and virilization.

Case Report

We present a case of a 33 year old lady who presented for irregular periods and primary subfertility. Investigations showed bilateral polycystic ovaries on ultrasound and unremarkable hormonal profile.

She underwent 1 cycle of Supraovulation and intrauterine insemination (SO-IUI) and 1 cycle of In Vitro Fertilization (IVF) and unfortunately did not get pregnant from either procedures.

1 year later, she presented with secondary amenorrhea and persistent subfertility. On examination she was noted to have developed a large Right adnexal mass.

Investigations:

MRI Pelvis: 7.4 x 6.6 x 5.9cm predominantly solid right adnexal mass

CA125: 246.5U/mL

CT Chest, Abdomen and pelvis: no evidence of distal metastasis

She underwent Laparotomy Right Salpingo-oophorectomy, frozen section, omentectomy and lymphadenectomy which confirmed steroid cell tumor with capsular involvement (stage 1C2). Adjuvant chemotherapy post operatively was offered but declined as patient was keen for fertility.

She underwent IVF post operatively and had a successful intrauterine pregnancy which unfortunately miscarried at 6 weeks gestation.

The patient remained well 3 years post operatively.

Conclusion

Ovarian steroid cell tumors are very rare functioning sex-cord stromal tumors.

Majority of these tumors secrete steroids e.g. testosterone, estradiol or cortisol.

Patients commonly present with hyperandrogenic features and virilization associated with high testosterone levels.

Less common symptoms include: abnormal uterine bleeding or Cushing's syndrome

Management:

-Postmenopausal patients:

Hysterectomy, bilateral salpingo-oophorectomy

-Young patients keen for fertility: unilateral salpingo-oophorectomy, fertility sparing staging, as well as fertility preservation treatment prior to chemotherapy or radiation therapy