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CASE REPORT

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Androgen secreting ovarian tumor

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Introduction

Androgen secreting tumors though rare are clinically obvious because of the resulting virilization. We report a case of Leydig cell tumor occuring 5 years after premature menopause.

Case report

A 40 year old 2nd para presented with the complaints of intense and frequent hot flushes and hirsutism since attaining premature menopause 5 years back . For the last 6 months she was undergoing treament for hirsutism with finasteride (5mg daily) and spironolactone (100 mg daily) from a private practitioner who had not ruled out the possibility of a vitilizing tumor. There was no improvement in the hirsutism and she had to shave daily to control the hirsutism.

On examination she was obese with acne, hirsutism, frontal baldness, coarse features, hoarseness of voice and atrophic breasts, and weighted 70 kg. Genital examination revealed clitoral hypertrophy. On vaginal examination, there was a 10x10 cm mass in the anterior fornix. The uterus appeared to be of normal size. She was admitted on 29th December, 2001.

Ultrasonography showed an ovarian cyst of 10x10 cm, which appeared to be from the left ovary. The other findings were normal. Serum testosterone was markedly raised to 934 ng/dL (normal 14.76ng/dL). Serum FSH was 7.6 mlU/mL and serum E_2 169 pg/mL.

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With a provisional diagnosis of androgen secreting tumor of the ovary, laparotomy was done on 31st December, 2001. The uterus was bulky with a normal looking right ovary, while the left ovary had a 10x12 cm mass which was partly solid and partly cystic. The liver and omentum felt normal on palpation. There were no enlarged pelvic or para-aortic nodes. A total abdominal hysterectomy with bilateral salpingo-oophorectomy was done. The right adnexa was removed at the patient's request since this was her 3rd laparotomy and she did not wish to risk the possibility of another laparotomy if the right ovary developd a tumor in future. The histopathological examination showed the uterus having chronic cervicitis, atrophic endometrium and superficial adenomyosis with follicular cysts in the right ovary and Leydig cell tumor in the left ovary (Figure 1). From the very next day following surgery, the patient had profound relief of symptoms especially the distressing hot flushes.

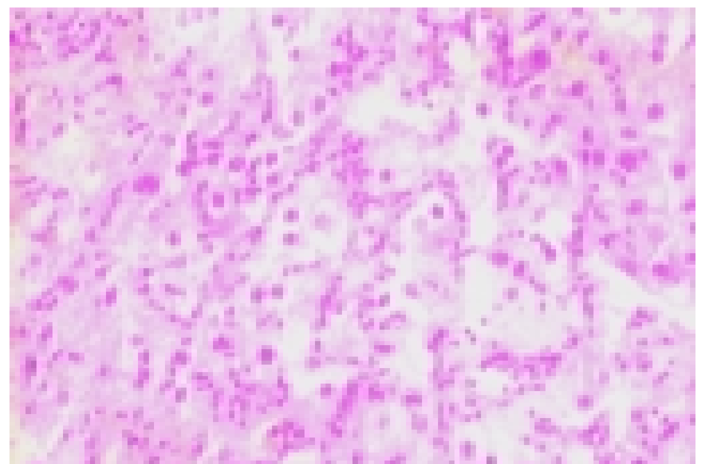

Figure 1. Leydig cell tumor of the left ovary. H and E stain. 40x.

She was discharged in good condition on 10th January, 2002. By 6 months, her hirsutism improved considerably. Her baldness disappeard and normal female pattern of hair distribution returned. The skin became softer. There was slight improvement in her voice too.

Discussion

Sertoli-Leydig tumors occur most frequently in the 3rd and 4th decades of life with 75% of the lesions seen in women younger that 40 years. These lesions are extremely rare and account for less than 0.2% of ovarian cancers [1]. Clinical virilization is noted in 70-85% of patients [2]. Most frequently, they are low-grade malignancies which do very well and need no adjuvant therapy, though rarely a poorly differentiated variety may behave more aggressively.

Reference

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