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Sertoli –Leydig Cells Tumor: A Rare Ovarian Tumor

Authors
Aparna Khan[1], Sima Biswas[2], Tshering Sherpa[3], Tamal Mondal[4], Satyabrata Roy[5]
[1,5]Associate Professor, [2,3]Junior Resident, [4]Senior Resident
Department of Obstetrics & Gynecology
R.G.Kar Medical College, 1, Khudiram Bose Sarani, Kolkata-700004, West Bengal, India

Corresponding Author
APARNA KHAN
Department of Obstetrics & Gynecology, R.G.Kar Medical College,
Email: *barapana.kol@gmail.com*.

Abstract

A 14 year old girl presented with 24 weeks lower abdominal lump, hirsutism, clitoromegaly and 3month amenorrhea. Serum testosterone was 1.34 ng/ml. Ultrasonography identified a mixed echogenic right ovarian tumor of 108×71 mm. A right ovarian tumor of about 20 cm in diameter was removed. Histopathology proved sertoli-leydig cells tumor.

Key Words : ovarian tumor, sertoli-leydig cells tumor

CASE HISTORY

A 14 years old girl came in the out-patient department of Obstetric & Gynecology, R.G.Kar Medical College Hospital with complaints of lower abdominal swelling, hirsutism, clitoromegaly and one episode of three month amenorrhea. She noticed lower abdominal swelling two month back and hirsutism and clitoromegaly about $1^1/_2$ years back before being

referred to the hospital. She had one episode of three month amenorrhea, after menarche at 13 year, at time of her first hospital visit but menstruation occurred spontaneously. She had breast development upto tanner stage 5. Internal examination and Ultrasonography showed normal uterus. Ultrasonography also revealed a mixed echogenic right ovarian mass measuring 108×71mm. left ovary was normal in size, shape, outline and echotexture. Routine investigations were within normal limit. Serum testosterone was 1.34ng/ml (only marginally raised).

A huse ovarian tumor of about 20 cm in diameter with increased vascularity was found on right ovary after laparotomy. The capsule of the tumor was intact. Both fallopian tubes and left ovary were normal. There was no ascites nor there any evidence of metastases in the gut loops, omentum, liver or under surface of diaphragm. The tumor was cut after removing. Cut section showed variegated appearance. The histopathology report showed well-differentiated sertoli-leydig cells tumor.

DISCUSSION

Sertoli-Leydig cells tumor is a group of tumors composed of variable proportions of sertoli cells, leydig cells and in case of intermediate and poorly differentiated neoplasms, primitive gonadal stroma and sometimes heterogenous elements[1]. Sertoli-Leydig cells tumor is a member of sex-cord stromal tumor group[2]. These lesions are extremely rare and constitute fewer than 0.5% of ovarian neoplasm[3]. Although it can occur at any age it primarily affects young women. Sertoli-Leydig cells tumors are mostly low-grade malignancies, although occasionally a poorly differentiated variety may occur. The tumors produce androgens, and clinically virilization is noted in 70-85% of patients[4]. Signs of virilization include oligomenorrhea followed by amenorrhea, breast atrophy, acne, hirsutism, clitoromegaly, deepening of voices and receding of hairline. Measurement of plasma androgen may reveal elevated testosterone and androstenedione and normal or slightly elevated dihydroepiandrostenedione sulphate[4]. Because these low-grade lesions are only rarely bilateral <1%, the surgery is fertility sparing unilateral

salpingo-oophorectomy and evaluation of the contralateral ovary for patients of reproductive age group[5]. For older total abdominal hysterectomy and bilateral salpingo-oophorectomy or radical for malignant tumor can be done. This is followed by adjuvant chemotherapy and radiotherapy. In all cases initial treatment is followed by surveillance. Because in many cases sertoli-leydig cells tumor does not produce elevated tumor markers[6]. The 5 year survival rate is 70-90%, and after that recurrences are uncommon[4,7].

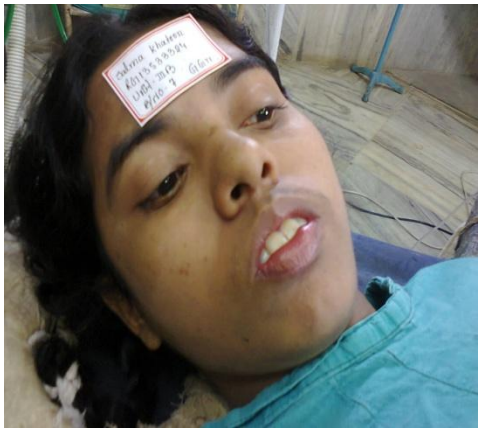

Figure 1: showing hirsitism

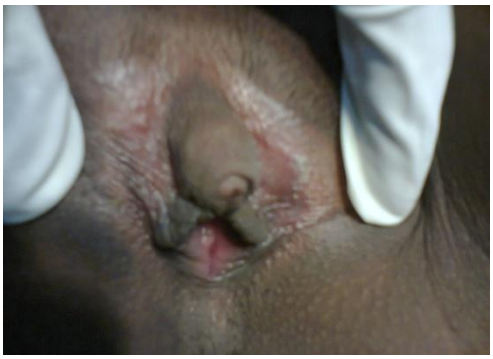

Figure 2 showing clitoromegaly

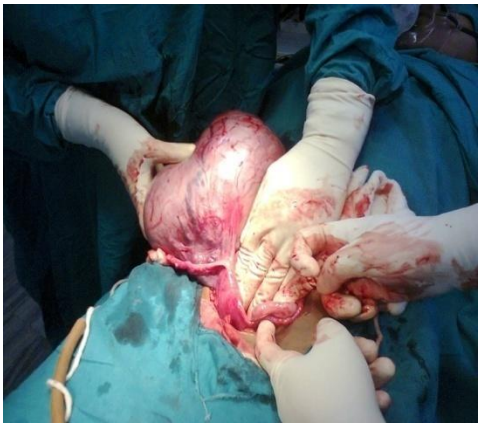

Figure 3 showing the tumor with normal size uterus, tubes and ovaries

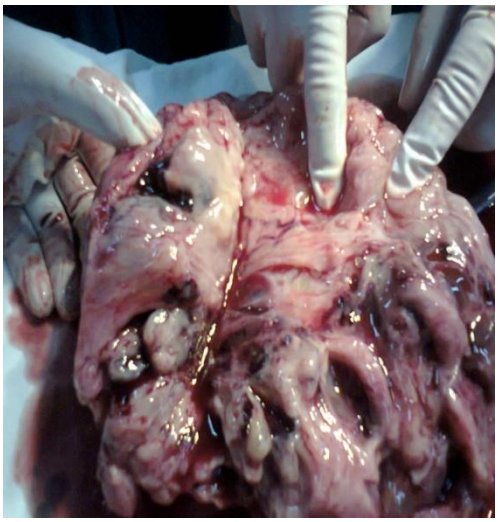

Figure 4 showing cut section of the tumor

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