A Case of Male Hormone Secreting Ovarian Tumour

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Miss A.K., 20 years muslim unmarried village lady was admitted in SSKM Hospital on 10.11.97 with C/O secondary ammenorrhoea for 2 years and hoarseness of voice for 6 months. Menstrual history – regular, cycle – 28 ± 2 days, duration – 4-5 days with moderate flow and usual pain.

O/E – Ht. – 153 cm., Wt. – 40 Kg., Span – 160 cm. Thin built with slightly prominent thyroid cartilage and dark hair line on the chin & face, with prominent and excess male type hair distribution over limbs. Breast – atrophic & smaller in size than before. Vulva – pubic hairs-male type distribution, Labia majora flat, Clitoris – well developed, hypertrophied. On P/V exam. – ut smaller than normal in size, mobile; left fornix – clear, right fornix – a partly solid partly cystic smooth walled freely mobile mass (10 cm x 7.5 cm x 7.5 cm) was felt.

All basic investigations were within normal limit. U.S.G. of pelvis & whole abdomen revealed – ut – 7 cm. x 2.1 cm. x 3 cm. No Sol seen in its echotexture with normal central endometrial cavity. A large rounded (10 cm x 8 cm) SOL mostly cystic and heterogenous in echotexture present in the region of right ovary and adnexa. Left ovary normal. No collection in P.O.D. Other systems normal. No sizeable para-aortic lymph nodes detected. Special test for TSH – 2.58 μIU/ml (normal range 0.15 – 4.00 μIU/ml). DHEAS – 210 μg/dl (normal 35.0 – 430.0 μg/dl) Serum testosterone 1.48 ngm/ml (normal female – 0.06 – 0.86 ngm/ml).

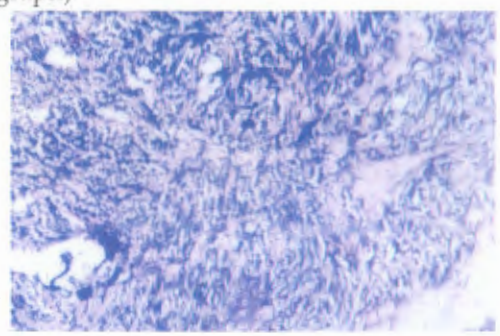
On Laparotomy on 13-11-98 ut. was found hypoplastic, no peritoneal fluid was found. A partly solid, partly cystic right sided ovarian tumour with intact capsule without any adhesion was removed by right ovariotomy. Left ovary was healthy. On further exploration adrenals felt normal with no metastasis anywhere. Post-operative period was uneventful.

Macroscopic Exam. Of the Tumor:

Well circumscribed solid tumor with cystic area filled by mucoid material. On cut section near hilar region of the tumor a solid yellowish (steroid hormone secreting) reniform mass (5 cm x 3 cm x 2 cm) seen within this cystic mass

H-P Report:

Examination from multiple sections from different parts of tumor revealed that "the great part of the tumor is composed of spindle-shaped cells with elongated plump-nuclei. At places nests, cords and trabeculae of sertoli cells were present with clumps of Leydig cells and cystic spaces filled with mucinous material. The spindle cell component exhibited brisk mitotic activity – poorly differentiated Sertoli – Leydig cell tumor (Arrhenoblastoma, Androblastoma)". (Micro-photograph)



Microphotograph showing poorly differentiated Sertoli-Leydig Cell Tumour

Follow-up:

Serum testosterone gradually came down to 0.9 ng/ml on 25.11.97 and 0.35 ng/ml on 02.02.98. She started normal menstruation on 10.12.97, just after a month of operation. On follow up after one year (23.11.98) she revealed a good feminine figure with well developed breasts, regular menstruation but with persistant hoarseness of voice. No other abnormality was detected on USG of whole abdomen.