

A CASE REPORT OF ARRHENOBLASTOMA

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Arrhenoblastoma of the ovary is a rare condition. This case of ours is published because of its rarity. M. Sadek Foda, Abdel Fattah Youssef and M. A. Shafeek have reviewed 240 cases and have added one case of their own. Paranjape A. R. reported one case in 1959. According to Mayer this tumour has its origin in primitive mesenchymal cells of the ovary having masculine potentialities. Novak has histopathologically classified these tumours in three categories as follows.

- (i) Testicular adenoma in which tubular pattern and interstitial cells are well defined — highly differentiated.
- (ii) Most undifferentiated-sarcomalike.
- (iii) Intermediate group where differentiation is seen to a varying extent.

The tumour under report is of the intermediate group.

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Case Report

A patient, D.J., aged 27, was admitted in the gynaecological ward on 1-8-1960. Her chief complaint was a lump in the abdomen since six months. Her history was that after her last delivery, which was five years ago, she did not get menstruation as usual. She went on having periods of amenorrhoea, oligomenorrhoea and hypomenorrhoea. Since the last two years she had complete amenorrhoea. She also noticed appearance of beard, moustache and abnormal hair on her body since 1 year and 9 months. Since the last five months she had hoarseness of voice.

Patient had menarchae at the age of 13 years. Thereafter she had normal menstruation till her last delivery.

She had 4 F.T.N.D., 2 male living; 2 died due to some illness. Last delivery was 5 years ago.

Past illness, Personal History, Family History, Nothing particular.

General Examination: The patient was fairly well built and nourished. She had female configuration of the body. Her voice was hoarse. She had a beard and moustache (Figs. 1 and 2). Pubic hair were like male distribution. There was no marked atrophy of the breast. Her pulse, temperature, respiration and blood pressure were normal.

Systemic examination revealed nothing particular.

Abdominal examination: An intra-abdominal tumour was found in the hypogastrium arising from the pelvic cavity a little to the right of the midline, size 6" x 6" firm nodular and with side to side mobility.

Bimanual Vaginal examination: Pubic hair, as mentioned, had male configuration.



Fig. 1

Photograph of the patient showing growth of beard and moustache.



Fig. 2

Profile view of the same patient.

External genitals were normal. Clitoris was not enlarged. Cervix pointed downwards and forwards, the uterus was retroverted, normal in size and mobile. Same lump was palpable through the right fornix.

Investigations: Haematological examination revealed haemoglobin 10.8 gm.%, red blood cells 3.6 mil./cu.mm., white blood cells 5100/cu.mm., polymorphs 68%, lymphocytes 32%. Routine urine examination was normal. Urinary estimation of 17-Ketosteroids was 30 mgm. for 24 hours. (Normal 7 to 14 mgm. for 24 hours in females; 11 to 27 mgm. in males.)

She was diagnosed as a case of arrhenoblastoma of the ovary.

Operation: Right-sided ovariectomy with a wedge biopsy of the left ovary was done on 8-8-1960. Postoperative period was uneventful. She was discharged on 25-8-1960 in good condition. Urinary estimation of 17-Ketosteroids at the time of discharge was 7.5 mgm. for 24 hours.

Pathology of the tumour: The tumour was slightly oval with flattened sides;

dimensions of 12.5 cms. x 10 cms. x 6 cms. The surface was nodular and consistency was firm. The cut surface showed the tumour to be solid, encapsulated and greyish white in colour with dark brown and yellow patches in different areas.

Histopathology showed (Figs. 3 and 4), groups of polygonal cells with clear areas (the lipoid being removed from the areas in processing). The cells show an incomplete attempt towards the formation of tubules. Histopathologically, it is thus suggestive of an intermediate type of arrhenoblastoma.

Wedge biopsy of the other ovary showed normal ovarian tissue.

Follow up: The patient started her periods 3 months after the operation, 6 to 7 days/30 days, regular, moderate and painless. She had about 4 to 5 periods after which she became pregnant. She gave birth to a male child at full-term. The boy is at present about a year old. She had lactation amenorrhoea for 4 months followed by normal periods. Lactation was also normal.

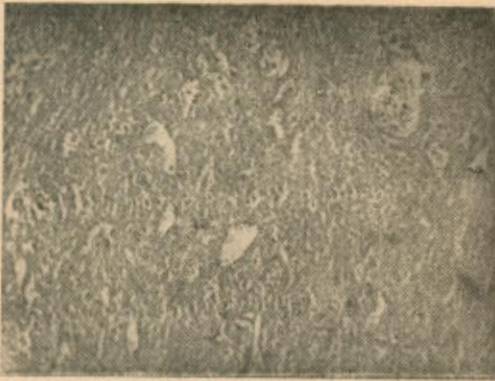


Fig. 3

Microphotograph of the histopathological slide in low power. Note an incomplete attempt towards the formation of tubules.

Hair from the beard and moustache have fallen off. Voice has also become softer. Other findings are within normal limits.

Summary

A rare case of arrhenoblastoma of the ovary has been presented with a short review of literature. Novak has stated that pregnancy can occur after removal of the tumour with birth of a normal baby. Similar is our experience in this case. It has been mentioned that cases of arrhenoblastoma may not show raised 17-Ketosteroids values; however, this patient had a definite rise of 17-Ketosteroid.

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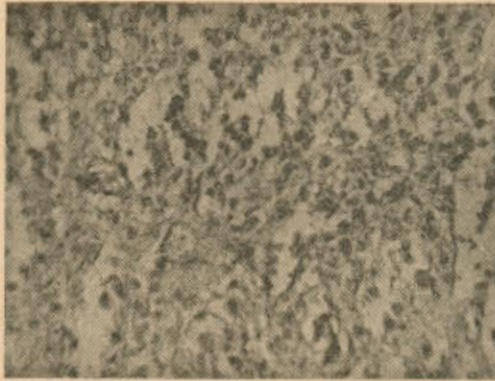


Fig. 4

Highpower view of the slide.

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