

THECA CELL OVARIAN TUMOUR BEFORE PUBERTY

(A case report)

by

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Before puberty, the occurrence of theca cell ovarian tumour is rare; only a few cases have been reported in the literature thus far. A case of theca cell ovarian tumour in a girl aged seven years is reported in this paper.

Case Report

The patient, aged seven years, was brought to the out-patients Department, Howrah General Hospital, by her mother on 10-8-65 as she had persistent slight vaginal bleeding for the last three months.

Family history:- The patient had two sisters. The elder sister was nineteen years old and married, with one child. The other sister was five years old with normal health.

Personal history:- The patient was temperamentally shy. Intelligence was normal for her age, appetite was good. She slept well at night. The bowels moved regularly and there was no trouble regarding micturition.

General examination:- The height of the patient was 120 cms. She was of average build. She was not anaemic. The breasts were prominent but no glandular tissue was felt. The nipples were highly pigmented. There was no growth of axillary or pubic hair. The body hair distribution was normal (fig 1).

Cardiovascular and respiratory systems were normal. B. P. 100/70.

Abdominal examination:- A mobile ab-

domino-pelvic lump was felt occupying the suprapubic region rising up to nine cms. above symphysis pubis. The mass was hard and smooth to feel. The upper and lateral borders were regular. The lower border could not be felt.

External genitalia:- The labia majora, labia minora and clitoris were well developed (Fig. 2).

Rectal examination:- The uterus was felt separate from the abdomino-pelvic lump and was normal in size.

Investigations

Urine examination:- No abnormal constituent was detected.

Blood examination:- Haemoglobin 75 per cent (Sabli). R.B.C. 4 million per cmm.; W.B.C. 8,000 per cmm.; polymorph. 55%; lymphocytes. 38%; eosinophil. 7%; monocytes. Nil. Bleeding time. 1 minute. Clotting time. 2½ minutes.

Skiagraphy of sella turcica was normal. The radiological report confirmed the age of the patient to be between seven and eight years.

Hormonal assessment could not be done due to want of proper facilities.

Management

Laparotomy was done on 27-8-65. A smooth glistening spherical solid yellowish white swelling of the right ovary with bluish cystic bosses standing out on the surface was found. There were no adhesions. The size of the tumour was 14.6 cms in breadth. The uterus was normal in size and shape. The left ovary was slightly enlarged.

The right ovarian tumour was removed. Biopsy of the left ovary was done. On bisection, the tumour was found to be solid

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with peripheral cystic spaces filled with blood-stained fluid (figure 3). The post-operative period was uneventful.

Histological section of the tumour showed spindle-shaped cells with prominent nuclei with lipoid containing cytoplasm. The histological diagnosis was theca cell ovarian tumour (figure 4). Biopsy of left ovary was normal.

Follow up till 2nd August, 1967.:-

The patient did not have any further vaginal bleeding since removal of the tumour. The breasts and external genitalia had retrogressed slightly. The general health of the patient was same as before.

Comments

The main clinical features in this case are, (a) persistent slight vaginal bleeding for three months in a girl aged seven years, (b) hypertrophied breasts and well formed external genitalia, and (c) right ovarian solid tumour.

Clinically the possibilities are, (a) constitutional precocious puberty with a solid ovarian tumour and (b) solid ovarian tumour secreting feminizing hormones.

In constitutional precocious puberty the vaginal bleeding is periodical and regular just like normal menstruation, whereas the vaginal bleeding due to a hormone secreting ovarian tumour is irregular. In this case the provisional diagnosis was hormone secreting ovarian tumour.

The final diagnosis of theca cell

ovarian tumour was confirmed by histological section of the tissue from the ovarian tumour.

F. Bottiglioni has reviewed 136 cases of theca cell ovarian tumour in the literature and added two of his own. He observed that 59.8 per cent of the patient were over the age of fifty and that the tumour was rare before puberty. The few cases before puberty reported so far showed endocrine activity. The endocrine activity of theca cell tumours is of feminizing type producing oestrogenic substances manifested clinically by symptoms and signs of hyperoestrogenism.

Excision of the tumour only was done as the patient was young and the tumour clinically showed no sign of malignancy.

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References

1. Bottiglioni F.: Riv. Ostet e ginec September. 15: 625, 1960.

Figs. on Art Paper VIII