DIMORPHIC OVARIAN TUMOUR (MUCINOUS CYSTADENOMA WITH DYSGERMINOMA)

(A Case Report)

by

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Introduction

Dimorphic ovarian tumours having two components separately or intermingled have been described in the literature. The combination of mucinous cystadenoma with a cystic teratoma (Fox *et al* 1968), Brenner tumour (Vora and Bhargava, 1969), fibroma (Novak and Woodruff, 1968), endometrioid tumour (Anderson, 1972) has been reported in the literature.

Various types of germ cell tumours have been associated with dysgerminoma. Abell *et al* (1965) describe an associated endodermal sinus tumour in one, and another case with endodermal sinus tumour, choriocarcinoma and a partially differentiated teratoma.

In the present paper we are reporting a rare case of combined ovarian tumour having mucinous cystadenoma and dysgerminoma as its components.

CASE REPORT

A patient of 40 years, was admitted in the Medical College Hospital, Aurangabad for lump in abdomen for 3 months. The menstrual cycles were regular and normal. The patient had 3 full term normal deliveries. General examination revealed pallor (+). Temperature was normal. Pulse 80/minute. Blood pressure 118/70 mm Hg.

On abdominal examination, a firm lump, 4" x 3", mobile and non-tender was palpable in left lower abdomen. Liver and spleen were not palpable. There was no free fluid in abdomen. Rest of the Systemic examination was normal.

Vaginal examination revealed a mass in the left fornix, firm to hard in consistency and mobile. The uterus could be felt separate from the mass.

Laboratory Investigation:

Hb 10 g%; TLC-6200/cm; blood sugar —98 mg%; blood urea 17.4 mg%; blood group A, Rh+ve.

Operative Findings:

On laparotomy, a left ovarian tumour, firm in consistency and well capsulated was detected. Contralateral ovary was normal. There were no adhesions. Left ovariotomy was done.

Pathological Findings:

Gross Features: (Fig. 1)—Oval swelling, 9 cm. x 5 cm. partly cystic. On cut section, brownish coloured fluid drained out. The cyst had two clearly demarcated solid parts. One oval with mucoid secretions (mucinous). And the other with greyish white with areas of necrosis and haemorrhage (dysgerminoma).

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Microscopic Examination:

Multiple sections were studied by routine haematoxylin and eosin staining and P.A.S. (Per iodic Acid Schiff's method). Sections from the mucinous part of the tumour (Fig. 2) revealed single line of tall—columnar cells with basal nuclei and intracellular mucin arranged in the glandular fashion. The structure was consistent with the appearance of mucinous cystadenoma.

The sections from the other solid area revealed sheets of cells having monotonous appearance with large hyperchromatic central nuclei and well defined eosinophilic granular cytoplasm. The groups of tumour cells were separated by fibrous septa which were infiltrated by lymphocytic cells. PAS stained sections showed P.A.S. +ve intracellular granules. The diagnosis was dysgerminoma (Fig. 3).

Discussion

Various types of tumours are seen to be associated with mucinous cystadenoma of ovary and dysgerminoma. The combination of mucinous cystadenoma and dysgerminoma in a ovarian tumour is rare and hitherto unreported.

A recent review of literature for past 20 years showed that of the 32 dysgerminomata in which there were other tumour elements, 14 were associated with malignant teratomata, 9 with choriocarcinoma, 5 with both choriocarcinoma and malignant teratoma and 1 with an adenocarcinoma (Fox and Langley, 1976).

Histogenetically, dysgerminoma is a germ cell tumour. The mucinous tumours are a heterogenous group. Some are thought to be derived from the surface epithelium of the ovary, and others as a monophylactic teratoma (Fox, *et al* 1964), the epithelial cells of the latter having argentaffin and argyrophyl or paneth cells.

It is likely that the tumor seen in our case may be a dimorphic germ cell tumour having dysgerminoma and mucinous cystadenoma as its components.

Summary

A case report of dimorphic ovarian tumour, mucinous cystadenoma and dysgerminoma, is presented. Relevant literature and histogenesis is discussed.

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See Figs. on Art Paper III