CYSTADENOFIBROMA OF THE OVARY

(A Study of 7 Cases)

by

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Cystadenofibromas of the Ovary are very rare tumors. It was first reported by Wolfe in 1927, in the English literature and later described as a specific tumor of the ovary by several authors (Scott, 1942; Sharman and Sutherland, 1947; Reddy and Sharda, 1966; Srivastava and Mali, 1970). Novak, Woodruff and Linthieum in 1963, reviewing 1950 Ovarian Tumor Registry, came across 44 cases of Fibroadenomas. Reddy and Sharda (1966) reported 5 cases of cystadenofibromas among 458 ovarian tumors from Guntur. On reviewing the records of Pathology Department, Kurnool Medical College, we came across 7 cases of cystadenofibromas (1960 to 1977) among 266 ovarian tumors forming a percentage of 2.6.

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CASE—1

A female aged 30 years complained of a mass in the right lower abdomen since 10 months, non-tender. Abdominal examination revealed a mass of 7 weeks pregnant uterus size. Vaginal examination revealed a solid swelling in the right fornix. A diagnosis of malignant ovarian tumour was made.

Operation: Total hysterectomy with right ovariotomy and left Salpingo-oophorectomy was done.

Gross appearance: Uterus with cervix appeared normal. There was a cystic papillary granular mass of 18 x 12 x 8 cms. with straw coloured fluid in the cyst.

Microscopic diagnosis was papillary cyst adenofibroma.

CASE—2:

A female aged 40 years complained of dull aching pain and swelling of abdomen of 4 months duration. Abdominal examination revealed a tense, cystic swelling mobile with uterus, enlarged to 6 weeks pregnancy. Vaginal examination revealed a cystic swelling in the right formix. A diagnosis of benign ovarian tumor was made.

Operation: Ovariotomy on right side was done.

Gross appearance: Thin welled cyst of 20 x 15 x 10 cms., unilocular and in two areas small papillary projections were made out.

Microscopic diagnosis: Papillary cystadenofibroma.

CASE—3:

A female aged 25 years was diagnosed as bilateral ovarian tumor (benign) and an abdominal hysterectomy with bilateral salpingo-oophorectomy was done.

Grossly left ovary was globular of 8 x 5 x 3 cms. cut section showed multiple papillary projections. Right ovary was firm and was of 9 x 6 x 3 cms.

Microscopic diagnosis:—Bilateral papillary cystadenofibroma.

CASE—4:

A female aged 20 years complained of severe pain in abdomen of 1 week and amenorrhea of 6 weeks duration. Abdominal examination was tender. Vaginal examination revealed a cystic mass of 5 x 5 cms. felt high up in the left formix, extremely tender. A clinical diagnosis of unruptured ectopic gestation was made.

Operation: — Uterus was enlarged 8 weeks pregnant uterus size and left ovary showed a cystic ovary of 6 x 6 cms. ovarian cystectomy was done on left side.

Gross appearance: — A small cyst of 6 x 6 cms. cut section showing white, solid and cystic areas.

Microscopic diagnosis:—Cystadenofibroma of left ovary.

CASE—5:

A female of 22 years complained of primary sterility. Abdominal examination revealed a cyst of 6 x 4 cms. on left ovary.

A clinical diagnosis of a benign cystic tumor of left ovary was made.

Operation:—Left ovariotomy was done.

Gross appearance:—A cystic mass of 6 x 4 x 2 cms. showing greyish white areas after cut-section.

Miscroscopic diagnosis:—Papillary serous cystadenofibroma.

CASE—6:

A female of 50 years complained of menorrhagia since 2 years. Abdominal examination revealed a mass of 6 weeks pregnant uterus size. Vaginal examination revealed a cystic mass of 10 x 6 cms.. in the right fornix. A clinical diagnosis of Fibroids uterus was made.

Operative findings:—Multiple fibroids of the uterus with a ovarian cyst was noted. An abdominal total hysterectomy with bilateral salpingo-oophorectomy was done.

Gross appearance: — Uterus showed multiple intestitial fibroids with areas of cystic degeneration. The right ovary showed multiple cystic tumors of 10 x 6 x 4 cms. with a gelatinous material inside.

Microscopic diagnosis:—Mucinous cyst adenofibroma.

CASE—7:

A female of 20 years was admitted with severe pain in abdomen. On examination diffuse tenderness was present in the lower abdomen. A clinical diagnosis of twisted ovarian cyst was made.

Operative findings:—Right side ovariotomy was done.

Gross appearance:—**An** unilocular cyst of 20 x 15 x 10 cms., showing dark brown fluid with greyish-white areas after cut-section. Papillary projections were noted in few areas.

Microscopic diagnosis:—Papillary serous cystadenofibroma.

Discussion

Adenofibroma is a rare tumor of the ovary. The rarity of this tumor is emphasized by the experience of Rothman and Blumenthal (1959) with over 746 ovarian neoplasms, only 5 of which were adenofibromata.

Cystadenofibroma is usually a histological diagnosis, as such diagnosis is rarely made preoperatively. In our 7 cases, the preoperative diagnosis was a benign ovarian tumor in 5 cases, except in 1 case a malignant ovarian tumor and in 1 unruptured ectopic gestation was suspected. Several sections from multiple paraffin blocks were studied and were routinely stained with H & E. Some of them were treated with special stains as Van Geisons and stains to demonstrate mucin. The tumor for the most part consisted of cystic spaces and solid areas of fibroma tissue and glandular elements. Majority of the

tumors showed multiple small cysts as well as the branching irregular channels lined by flattened and 'piled up epithelium. Some areas show gland like space, surrounded by connective tissue giving the appearance of fibroadenomas while in other areas show solid masses of fibromatous proliferation with irregular cavities into which protrude papillary masses covered by columnar and cuboidal epithelium. Among 7 cases of cystadenofibromas in our series, 6 cases were serous (Fig. 1) cystadenofibromas and 1 case was mucinous cystadenofibroma (Fig. 2).

The histogenesis of the ovarian cystadenofibromas are not clear. The theory which gained wide acceptance offers a dual basis for the formation of these tumors. The adenomatous portion is considered to be derived from the surface germinal epethelium which proliferates and penetrates the ovarian stroma in a way analogous to the development of the serous cystadenoma. The cortical stroma participates actively in the neoplastic transformation forming the fibrous component which characterizes these tumors. Depending on the secretory activity of the adenomatous areas large cysts, small cysts may be formed and distributed haphazardly in a fibrous stroma (Cromton and Frank, 1970).

Cystadenofibromas are unilateral in the majority of cases. In Scott's series out of 15, 2 were bilateral. In the present series out of 7, 1 was bilateral (Case 3). One case was associated with multiple fibroids of the uterus (Case 6). The commonest age group at which the tumors appeared were between 20 to 40 years. But in case 6 the mucinous cystadenoma appeared at the age of 50 years. Very rarely these tumors produce endocrine disturbance. None of the patients in the present series had suffered from endocrine disturbances.

Postoperatively, recurrence of these tumors is uncommon and one would expect most of these women to resume normal lives following operation. The frequency of malignant transformation is extremely rare. (Rothman and Blumenthal, 1959) and is not noted in the present series.

Summary

1. Literature on Cyst adenofibroma is briefly reviewed.

2. Seven cases of Cystadenofibromas are recorded and the histogenesis is briefly discussed.

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See Figs. on Art Paper XV