MESONEPHROMA OF OVARY

(A Case Report)

by

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In 1939, Schiller called attention to a group of cystic ovarian tumours having a specific cell type and a characteristic structural entity. The specific cell was found lining the cystic spaces and was described as flat having a prominent nucleus and little or no cytoplasm and frequently separated from its neighbours by a distinct space (hobnail and naked nucleus have been applied to these cells). He originally described this tumour as being of mesonephric origin because of:

1. Resemblance of the tumour cells to the endothelium of the glomerulus.
2. A generalized tubular pattern, histologically resembling mesonephric tubules.
3. Isolated tufts and buds of tumour cells resembling glomeruli.
4. A tendency to involve not only the ovary, but other areas compatible with a mesonephric origin, such as the broad ligament.

Later Jones and Seegam and also Stromme and Traut did not accept the mesonephric derivation of these tumours. They thought it as a teratoid adenocystoma of ovary.

We have encountered a case of mesonephroma which, exhibited the Schiller's type of tumour pattern and is recorded below for its rarity.

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Received for publication on 29-1-72.

CASE REPORT

A female aged 35 years was admitted to Kurnool General Hospital, Kurnool, in December 1971 with the complaint of irregular bleeding per vaginam for the past seven months. Bleeding used to come once in 48-60 days and lasted for four to five days. Prior to this, menstrual cycles were regular, once in 28 days, and lasted for 4 to 5 days. She had three abortions. Attained menarche at 13th year and was married six years ago.

Physical examination revealed moderately built and well nourished woman, not anaemic, not jaundiced, not cyanosed, and there was no generalised lymphadenopathy. Uterus was of normal size, anteverted, but was pushed to the left. A cystic mass was felt in the right fornix 3″×3″ size, tender and fixed. The physical findings were not suggestive of ectopic gestation. Left fornix was free.

Investigations revealed absence of albumen or sugar in the urine and the frog test was negative. Total W.B.C. count was 6,000 cmm with a differential count of

75% polymorphs, 24% lymphocytes and 1% eosinophil. Haemoglobin was 11 grm%. Temperature was 99°F and respirations 18/mt. Blood pressure was 130/70 mms. of Hg. and pulse 80/mt.

In view of the cystic mass being palpable in the right fornix, a provisional diagnosis of right tubo-ovarian mass or right ovarian cyst was made.

Operation

Abdomen was opened under general anaesthesia. Right ovary was cystic and of the size of 6″×4″, discolouration of the wall was present. Multiple adhesions were present to the surrounding structures and were released. During this process the cyst ruptured accidentally and brownish fluid escaped. Right tube was blocked and right salpingostomy was done. The right, ovarian cyst was removed. The left ovary was also cystic and the left tube was also blocked. Post-operative period was uneventful.

Pathology: A mass of 4″×4″ was received showing papillary projections on its external surface. It was partly cystic and partly collapsed, wall being very much thickened containing brownish fluid (Fig. 1).

Histopathology: The entire tumour mass was studied. In some of the sections, ovarian stroma could be made out. The most striking feature was the characteristic tendency to form tubules which bore a resemblance to those of the mesonephric system (Fig. 2). These tubules were lined by a low cuboidal epithelium which was frequently heaped up over a connective tissue core in which capillaries were seen. These buds projected into the lumen of the tubules and produced an imperfect resemblance to glomerular endothelium (Fig. 3).

Morbid anatomical diagnosis: Mesonephroma of the right ovary.

Discussion

One review of our autopsy and biopsy files, we had 230 ovarian tumours of various types. Serous cystadenoma was the commonest with mucinous cyst adenoma the second commonest. The case being reported was the only case of mesonephroma of ovary.

Tumours arising from vestigial remnants of mesonephric ducts or tubules may present in two basic, but entirely different forms. The first is the variety frequently referred to as the Schiller's mesonephroma while the other is characterized by the large, clear cell closely resembling, if not identical, with the one found in hypernephroma. These can be found independently or both in the same tumour. All kinds of admixtures and transition forms between the two may be present.

The mesonephroma is almost always unilateral. When both ovaries are involved, it seems quite apparent that the disease was primary on one side with contralateral extension. In the case recorded the tumour was seen only on one side, the other ovary being cystic. The tumour can be of variable size. It can even extend upto xyphoid process or above the umbilicus or can be present as a tiny mass. In the present case the tumour measured only 4″×4″. The exterior of the tumour is usually smooth walled and papillary excrescences are rarely mentioned as a gross phenomenon, as seen in the present case. Ascites and peritoneal implants are rare. These two were not seen in the case recorded. The tumour is usually described as being cystic, either multilocular or parvilocular, although concomitant solid areas were frequently noted. Rarely, it may be partly cystic and partly solid. Sometimes, the tumour may present itself as a twisted ovarian cyst and rupture also may occur.

There is lot of controversy as to the histogenesis of this tumour Currently it is believed that mesonephroma is not a truly ovarian lesion in that its origin is probably from mesonephric remnants in close proximity to the ovary. As the tumour develops and enlarges it encroa-

ches on and frequently replaces the gonad so that the designation mesonephroma of the ovary, while perhaps not proper, has achieved common usage. Prognosis of these tumours vary. The case recorded is being followed up. So far there has been no recurrences or metastases.

Summary

A case of mesonephroma of ovary with typical Schiller's histologic pattern is reported for its rarity.

Acknowledgements

The authors are thankful to Dr. M. Jawad Ali Khan, M.B.B.S., Sri P. Haricharanapathi, Photographer and Mr. G. Prahlada Rao, Steno-typist for helping them with photographs and manuscript work respectively.

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See Figs. on Art Paper IV