

BRENNER TUMOUR OF OVARY

(A Case Report)

by

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It was indeed a pleasant surprise to Dr. Brenner who was then practising general medicine in South Africa to find out that the tumour described by him in 1907 as Oophoroma Folliculare has been called after him. Historically speaking the credit ought to have gone to McNaughton Jones (1898), Fothergill (1902) or to Hellier and Smith (1902) who had described such tumours prior to Brenner.

Brenner Tumours are interesting because of the histogenetic controversy, the rare incidence and the occasional hormonal activity associated with some of these tumours.

CASE REPORT

Mrs. K. aged 67 years was admitted to Govt. Hospital, Kodungallur on 29.9.1974 complaining of dragging pain on left side of lower abdomen, of six months' duration.

She had attained menarche at the age of 15 years. Cycles were regular occurring every 28 days and lasting for 3 to 4 days. She had menopaused 15 years ago.

She married at the age of twenty-one and had 9 full-term normal deliveries. The last childbirth was 29 years ago.

General examination and routine investigations did not reveal anything abnormal. On vaginal examination a solid tumour (in the left fornix) (about 5 cm in diameter and freely mobile was palpated. The right fornix was free. The uterus was in midposition and of normal size.

Provisional diagnosis of solid ovarian tumour was made. At laparotomy on 7.10.1974 the left

ovary was found to be the seat of the tumour. The right ovary was atrophic. Left ovariectomy and right salpingo-oophorectomy were done and abdomen was closed in layers. The specimen was sent for histopathological examination.

Histopathological Report Macroscopic Appearance

The pearlish grey tumour measures 5 Cm x 4 Cm x 3 Cm (Fig. 1). Cut section shows homogeneous appearance with fibroma like consistency (Fig. 2).

Microscopically, section from the tumour shows areas of spindle cells with clear spaces in between. In places groups of epithelial cells are seen. Nuclei display grooved nature rendering the typical "puffed-wheat" appearance (Fig. 3).

Diagnosis—Brenner Tumour

The postoperative period was uneventful and the patient was discharged from the hospital on 17.10.1974.

Discussions

The majority of cases of Brenner Tumour reported are small tumours found incidentally. (Ming and Goldman 1962). The present case was also found out by chance on bimanual pelvic examination for vague dragging pain in the lower abdomen. Occasionally large tumours have been reported Talib *et al* (1974) and Rao *et al* (1974).

The incidence of Brenner tumour is given as 1.7% (Hertig and Gore, 1961). In recent Indian literature Ramchandran *et al* (1972) give the incidence as 1.22% among 903 ovarian neoplasms. Rao *et al* (1974) came across only one case

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among 196 ovarian tumours reported by them. In Government Hospital, Kodungallur during the two year period from January 1973 to January 1975 there were 30 ovarian neoplasms of which this is the only instance of Brenner tumour.

Most of the tumours occur in the menopausal age group (Berge and Borglin, 1967, Jorgensen *et al* 1970, Masani 1971). The present case is also in a postmenopausal woman of 67 years.

The most interesting aspect of Brenner tumour to that in the comata suggests its histogenesis. The histogeneses postulated by different workers are (i) Walthard-Cell-Nests (Meyer 1932, Danforth, 1942). (ii) Dislocation into the ovary of the germ cells which primarily belonged to urinary system (Schiller, 1936). (iii) Ovarian stroma (Rete Ovarii) (Greene, 1952). (iv) Coelomic ovarian surface epithelium (Lauchlan, 1966). (v) Urethelial (mesonephric) metaplasia of surface epithelium (Sternberg, 1963).

Another aspect which fascinates the pathologist as well as the Clinician is the occasional hormonal activity associated with some cases of Brenner tumour. The similarity of the stroma in Brenner tumour to that in thecomata suggests its hormonal potency (Biggart and Macafee, 1955, Silverberg, 1971).

Because of the lower incidence of malignancy and advanced age of the patient surgery was limited to ovariectomy.

Summary

A case of Brenner tumour in a postmenopausal woman is reported. The current concepts of histogenesis and hormonal activity are mentioned.

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See Figs. on Art Paper III-IV