

MALIGNANT BRENNER TUMOUR OF THE OVARY

(Report of a Case)

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Brenner tumours of the ovary are generally benign and occur in women past the menopause. Up to February 1955, only 6 examples of malignant Brenner tumours have been reported in the literature. In view of the rarity of a malignant Brenner tumour, the following case, encountered at the Tata Memorial Hospital, Bombay, is reported.

Report of a Case.

A 70-year-old Hindu woman (no. N-1466) was admitted to the Tata Memorial Hospital, Bombay, on April 1, 1953, with fever, loss of appetite, loss of weight and pain in the back. Menopause had occurred several years previously and there had been no vaginal bleeding since that time.

Physical examination showed that the patient was in fair health. There was a nodular mass situated in the lower abdomen. It was movable from side to side. Pelvic examination showed the cervix to be high up and distinct from the mass. The uterus was small.

A roentgenogram of the lungs was reported normal. On May 15, 1953, the patient was operated on, and at the operation a tumour was found in relation with the left ovary. A subtotal hysterectomy with bilateral oophorectomy was carried out.

Gross Description. The surgical specimen measured 13 x 9 x 8 cm. It was covered over by a smooth glistening capsule. The consistency was hard. The cut surface showed greyish or yellowish

opaque areas (Fig. 1). The right ovary was fibrotic while the uterus was small and did not show any abnormal findings.

Microscopic Description. Several sections were taken for microscopical examination. Some of these showed fibrous stroma within which were nests of epithelial cells. The nuclei were ovoid in shape and uniform in size. These were areas showing the structure of a benign Brenner tumour (Fig. 2). Other sections showed essentially similar fibrous stroma, but the epithelial cell nests showed marked pleomorphism. The nuclei were hyperchromatic and showed a variability in size. Mitotic figures were seen (Fig. 3). These were interpreted as areas showing a malignant change.

Follow-up. After discharge from the hospital, the patient reported at the clinic on July 7, 1953, and September 8, 1953, for a check up. She had no complaints and examination revealed no abnormal findings. Queries in December 1954, and February 1955, also stated that she was well and free from symptoms. The patient came to the hospital again on July 29, 1955. She had no symptoms but the routine roentgenogram of the chest showed extensive bilateral metastases in the lungs (Fig. 4). She died on August 8, 1955. There was no autopsy.

Comment

The clinical course of this patient clearly indicates malignancy of the tumour. Histologically, the picture was clear cut. In some portions the tumour showed the typical structure

of a benign Brenner tumour, but in other sections, anaplasia in epithelial cells proclaimed malignancy.

Summary

1. A case of malignant Brenner tumour of the ovary is presented.
2. Areas of benign Brenner tumour were present in some sections, side by side with this were areas showing anaplasia,

which gave a clue to the exact nature of the tumour, namely, that it was a malignant Brenner tumour.

I wish to thank Dr. Arthur T. Hertig and Dr. Emil Novak for expressing their opinion on the histological sections of this tumour.

Reference

1. Rawson A. J. and Helman M. R.: *Am. J. Obst. & Gynec.*, **69**: 429-437, 1955.

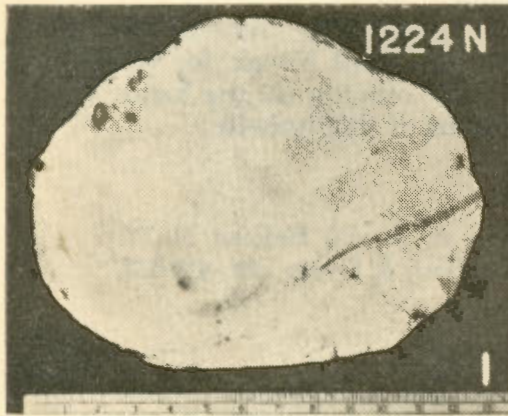


Fig. 1
Cut surface of the surgical specimen (Path. No. 1224-N) showing dense fibrous structure resembling a fibroma.



Fig. 2
Photomicrograph of areas of benign Brenner tumour, showing nests of epithelial cells surrounded by fibrous stroma. The nuclei are ovoid in shape and uniform in size. (H & E Stain x 120)

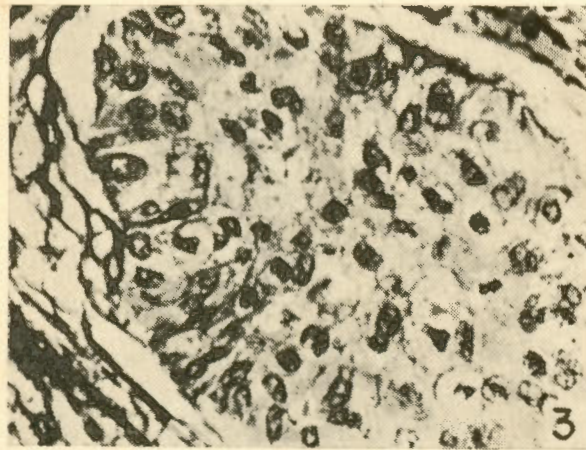


Fig. 3
Photomicrograph showing an area of malignant Brenner tumour. Note the pleomorphism of the tumour cells and the hyperchromatic nuclei. (H & E Stain x 460).

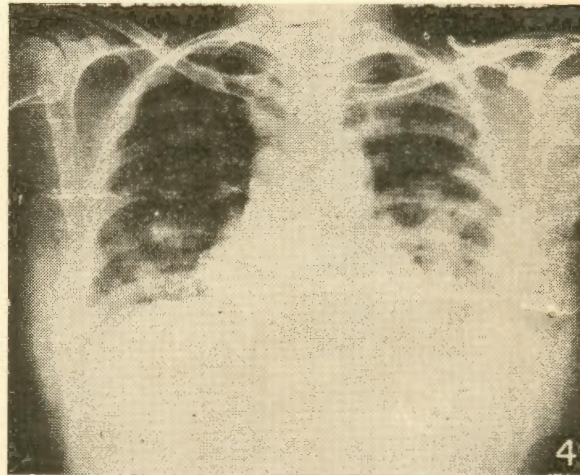


Fig. 4
Roentgenogram showing bilateral pulmonary metastases.