BRENNER TUMOUR OF OVARY

(A Case Report)

by

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Introduction

Brenner in 1907 first reported a tumour which was stromo-epithelial in nature and designated it as "Oophoroma folliculare". It is usually unilateral but Jondahl *et al* (1950) reported 2 bilateral tumours out of 31. Patil *et al* (1967) reported 2 cases of Brenner out of 82 ovarian neoplasms in 5 years. Mutatkar *et al* (1970) also reported one case of Brenner tumour in ovary. It is a non-functioning tumour but Mackinlay (1956) reported vaginal bleeding in one case. This paper is reported because of its rarity.

CASE REPORT

A Hindu female aged 40 years was admitted to the P.B.M. Group of Hospital, Bikaner for swelling in lower abdomen since last 2 years. Frequent pain in abdomen since 10 years. The swelling gradually increased in size to the present dimension. Her previous menstrual history was normal. Menstrual history $^{I\text{-}2}/_{15\text{-}20}$, flow scanty. L.M.P. 6 days ago she had 4 full term deliveries, last about 7 years back.

On abdominal examination there was a lump in the Umbilical, right lumbar and right hypochondriac regions measuring, about 5 x 3 cm. hard in consistency, freely mobile and could be shifted to any quadrant of the abdomen.

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Vaginal examination: On speculum examina- cervix and Vagina healthy. On vaginal examination, uterus was of normal size and fornices were clear.

Laparotomy was done. There was no free fluid in the abdomen. The tumour was solid arising from the right ovary. Other ovary was normal. The tumour was excised and abdominal hysterectomy was done. The patient made an uneventful recovery.

Macroscopic Examination

The specimen of uterus, cervix, both sides tube, one side normal ovary and one side ovarian tumour mass weighed 800 grams and measured separately as Uterus 10 x 5 x 2.5 cm in size, one sided ovary 2.75 x 1.75 x 0.5 cm in size ovarian tumour of 5.5 x 3.5 x 3.3 cm in size. External surface at places was nodular but smooth. Cut surface shows greish white appearance. At places cysts were present.

Microscopic examination

H and E section showed fibrous element surrounding the epithelial nests, which were uniform and having longitudial grooves, characteristic of the tumour. Slightly condensed ovarian tissue present.

Comments

Novak and Novak (1939) found 19 cases out of 48,000 specimen. It usually occurs in women of 40 years. It is usually small in size but Jondahl *et al* (1950) reported variation in size from 0.4 to 19 cms in diameter. The largest solid

Brenner tumour reported by Averback *et al* (1957) weighed over 19 pounds.

Brenner (1907) believed the lesion to be a variety of granulosa-theca cell tumour because of the ovum like structure seen so often within the cell nests and because of the superficial resemblance of the latter to follicle. Meyer (1932) believed that the tumour arose from the islands of indifferent cells first fully described by Walthard in (1903). Greene (1952) with his co-workers have presented evidence that Brenner tumour may arise from other sources including the surface epithelium of ovary. Ehrlich and Roth (1971) in their review of 57 cases suggested that it arises from uroepithelium. Areys (1961) from his recent study showed that the tumour arises from surface epithelium with subsequent downward cord-like growth.

Most workers agree that it is a hormonally non-functioning tumour. But Eaton and Parker (1958) and Mackinlay (1956) have reported uterine bleeding in some cases. They found endometrial hyperplasia, post-menopausal non-atrophic endometrium and even endometrial carcinoma. Brenner tumour is usually benign but malignant change is known to occur in it and has been reported by Mackinlay (1956) and Sirsat (1956) in 12 cases.

Summary

A case of Brenner tumour is reported with a brief review of controversial histogenesis.

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References

1. Areys, L. B.: Am. J. Obst. et Gynec. 81: 743, 1961.
2. Averbach, L. H., David Promin, and George, C. Hanna, J. R.: Phildelphiap P.A. Am. J. Obstet & Gynec. 74: 207, 1957.
3. Brenner, F. Frank Ztschr F. Path. I: 150, 1907.
4. Ehrlich, C. E. and Roth, L. M.: Cancer, 27: 32, 1971.
5. Eaton, B. and Parker, R. A.: J. Obstet. & Gynaec. Brit. Emp. 65: 95, 1958.
6. Greene, R. R.: Am. J. Obstet. & Gynec. 64: 878, 1952.
7. Jondahl, W. H., Dockerty, M. B. and Randall, L. M.: Am. J. Obstet. & Gynec. 60: 160, 1950.
8. Mackinlay, C. J.: J. Obstet. & Gynec. Brit. Emp. 63: 58, 1956.
9. Meyer, R. and Zentralbl, F.: Gunak 56: 770, 1932.
10. Mutatkar, A. V., Gupta, P. and Naneli, R. L.: J. Obstet. & Gynec. of India, 20: 834, 1970.
11. Navok, E.: Am. J. Obst. & Gynec. 38: 872, 1939.
12. Patil, P. N., Sathe, K. Y. and Shukla, R. N.: J. Obstet. & Gynec. of India, 17: 96, 1967.
13. Sirsat, M. V.: J. Obstet. & Gynec. of India, 6: 400, 1956.