

MALIGNANT STROMATOSIS

(Review of literature and report of a case)

by

D. BHASKARA REDDY,* M.D.,
K. VENKATESWARA RAO,** M.D.,
and
V. RAMANAMMA,† M.D., D.G.O.

Stromatosis or stromal endometriosis is a comparatively rare clinicopathological entity which is being increasingly recognised during recent times.

Casler, in 1920, described in detail this condition and gave the name of "Stromatous endometriosis". Prior to that the condition was described by other workers, Virchow (1864) Doran and Lockyer (1908) under the name of Periepithelioma of Uterus. Since then a good number of reviews have appeared in the literature regarding this condition, by Goodall (1940), Roberts et al (1942), Miller and Tennent (1942), Parl and Tennent (1948), Park and Tennent (1948), Park (1949, a and b), Dacuna (1950), Lash and Lash (1951). From India, Kumar et al (Lucknow—1953) reported two cases of stromatosis, of which one was benign and the other malignant.

Malignant variants of stromal endometriosis, are very rare and even a single case is worth recording; the following case report is recorded for its rarity.

CASE REPORT:

Hindu female, aged 45 years, was admitted in Government General Hospital, Guntur, with a complaint of blood-stained and white discharge of 3 months' duration, with a history of passing blood clots. Patient was married and had 3 children. No history of abortion. For 4 months, the periods were profuse and prolonged. On examination—uterus was enlarged to 18 weeks' size and symmetrical, cervix was hypertrophic. A clinical diagnosis of "fibroid uterus" was made and a laparotomy performed. Haemorrhagic fluid was present in the abdomen. Uterus was enlarged to 18 weeks' size and soft in consistency. There were cystic vascular friable masses 4" in diameter at the fundus which were adherent to the bowel. While separating the adhesions, the cysts ruptured exuding haemorrhagic fluid. The growth was infiltrating the right parametrium. There was induration in the left parametrium, and infiltration into the pelvic wall. Ovaries on both sides were not identified. Hysterectomy with bilateral salpingo-oophorectomy was performed.

Macroscopic examination: Specimen consisted of uterus, tubes and ovaries showing multiple whitish, firm masses of varying sizes situated at the fundus. (fig. 1).

*Prof. of Pathology.

**Asst. Prof. of Pathology.

†Add. Prof. of Obstetrics & Gynaecology.

Guntur Medical College, Guntur, (A.P.).

Received for publication on 3-3-67.

Cut section showed whitish, whorled appearance.

Histopathology: Biopsy No. 5444/66.

Cervix: showed evidence of chronic cervicitis.

Uterus: showed glandular and marked stromal hyperplasia and these stromal cells were seen in the myometrium, and in areas the basal glands of the endometrium were completely surrounded by annular clusters of tumour cells. The stromal cells had invaded the myometrium in clusters (fig. 2), most of them were spindle-shaped and highly cellular with vascular invasion in certain areas (fig. 3). Vessels were usually thick walled and the stromal cells arranged concentrically around them. Stromal cells also invaded the ovarian stroma and showed similar histological features. Some of the cells showed deep staining nuclei and pleomorphism (fig. 3) suggesting a sarcomatous change.

Tubes showed chronic salpingitis.

Sections stained with reticulum stain showed the cells surrounded by delicate reticulum fibres.

Diagnosis: Malignant stromatosis.

Comment

A perusal of reliably reported cases of stromal neoplasms reveals characteristic features regarding the clinical and pathological aspects of the disease. The incidence itself is low when compared with other neoplastic conditions of the uterus. Only 100 cases have been reported in the English literature. From India we could come across only a report of two cases from Lucknow (1953). We have noted only one case of stromatosis in a review of 2380 gynaecological specimens.

The age incidence varies from 20 to 70 years and the vast majority occur between the ages of 30 and 50. A few cases have been reported in post-menopausal women which indicates that the growth is not depend-

ent on ovarian function. In the case recorded the age was 45 and she had not attained menopause.

Menometrorrhagia, post-menopausal bleeding, pelvic pain, vaginal discharge, bowel obstruction and enlargement of the abdomen have been reported as symptoms. The enlargement of the uterus may be diffuse or nodular. Of all the manifestations, enlargement of the uterus, vaginal discharge and menometrorrhagia are most common. In the case recorded, vaginal discharge, enlargement of uterus and profuse prolonged periods were observed. Hypertrophy of the cervix is common, also seen in the case reported. When the growth is encountered in young women, relative infertility is prevalent, but in most of the reported cases the patients have borne from one to several children. In our case the patient was a mother of three children. Most of the growths are histologically benign, some definitely malignant. In the case recorded, there was definite evidence of histologic malignancy in addition to the blood-stained peritoneal fluid and adhesions to the loops of intestine, and infiltration into the parametrium, pelvic wall and ovaries. In any event, with adequate and wide surgical removal, prognosis is quite favourable in most of the cases. In the case reported hysterectomy and bilateral salpingo-oophorectomy with removal of the infiltrated tissues was done and the patient is being periodically followed up for either recurrence or metastases.

Summary

1. Literature on stromatosis is briefly reviewed.

2. A case of malignant stromatosis is recorded for its rarity.

Acknowledgements

With pleasure we acknowledge the help rendered by the Photo-artist Sri B. Venkateswara Rao.

References

1. Casler, De. W. B.: Surg. Gynec. & Obst. 31: 150, 1920.
2. Dacunha, F.: J. Obst. & Gynec. Brit. Emp. 57: 633, 1950.
3. Doran, A. G. H. and Lockyer, C.: Proc. Roy. Soc. Med. Obst. & Gynec. Sect. 2-25, 1908-9.
4. Goodall, J. R.: J. Obst. & Gynec. Brit. Emp. 47: 131, 1940.

5. Lash, A. F. and Lash, S. R.: Am. J. Obst. & Gynec. 62: 1163, 1951.
6. Mangalik, Kumar, D. and Wahal, K. M.: I.J.M.A. 23: 41, 1953.
7. Miller, J. R. and Tennent, B.: Am. J. Obst. & Gynec. 47: 784, 1944.
8. Park, W. W. and Tennent, R.: A. J. Obst. & Gynec. Brit. Emp. 56: 755, 1949 a.
9. Park, W. W. and Tennent, R.: 56: 759, 1949 b.
10. Robertson, T. D., Hunter, W. C., Larson, C. P. and Snyder, G. A. C.: Am. J. Clin. Path. 12: 1, 1942.
11. Virchow quoted by Stearns, H.: Am. J. Obst. & Gynec. 75: 663, 1958.

Figs. on Art Paper III