

STROMAL ENDOMETRIOSIS

(A single Case Report)

by

K. PADMA R. RAO, M.D.

Stromal Endometriosis is a clinico-pathological curiosity in gynaecological practice. It is ectopic endometrium in the myometrium with absence of glandular elements, comprising therefore of stromal cells only. Clinically benign, it has endolymphatic and vaso invasive malignant manifestations, eventually destroying the host. From 1908, about 100 cases have been reported from the West, the greatest number reviewed being 94, by Hunter (1958). From India, the first report was from Mangalik (1953). After a lapse of ten years, Rao *et al* (1963) and also Reddy (1967) reviewed the literature. From Delhi, Pinto in 1963 and later Aron *et al* in 1970 reported a few cases. The total number of cases from India therefore up-to-date is only 8.

Virchow described it in 1954 and Doran in 1909, but the first authentic record was by Casler in 1920. Goodall (1940) attributed the origin to stromal cells and reported 14 cases and called it 'Stromatous endometriosis'. He emphasised that it was a variant of adenomyosis because it occurs in menopause and was not ovarian dependent having the capacity to penetrate vascular and lymphatic channels. Park (1949) rejected this concept and proposed that under suitable stimulus the stromal cells are capable of new growth and suggested the term "stromatoid mural

sarcoma". Kumar *et al* (1958) felt that this hypothesis of multipotent cells was wrong. Embrey (1952) explained it as a haematoma of adult life with neoplastic characteristics. Pedowitz (1954) demonstrated that this arose from pericytes and called it haemangiopericytoma. Hunter (1958) using the same staining technique contradicted this and confirmed the origin as stromal cells. Novak, Shaw, Lewis and Masani refer to this condition as stromal or stromatous endometriosis and thus these terms have come into popular usage. The other names used are endolymphatic stromal myosis, fibromyosis, and stromal adenomyosis (Novak).

Case Report

A 35 year old Muslim woman was admitted on 29-9-1970 at 3 P.M. as an emergency with amenorrhoea of 5 months, severe pain over lower abdomen and bleeding per vaginam since 2 days. She was para II and her last delivery was 12 years back which was full term and normal. Her menstrual history was regular, her last menstrual period being 5 months' back.

General examination revealed that the patient was emaciated and anaemic. Heart and lungs were normal. She had temp. 100°F and pulse was rapid with low volume and tension.

On abdominal examination, there was a multilobular soft, mobile, tender mass extending upto the epigastrium.

Vaginal examination confirmed that this suprapubic mass was the enlarged uterus. The cervix was pointing forwards and was closed. There were plenty of clots in the vagina. An urgent X-Ray of abdomen taken

Associate Prof. in Obst. & Gynec., Bangalore Medical College, Bangalore.

Received for publication on 25-2-1971.

to exclude pregnancy did not reveal foetal shadow. A provisional diagnosis of uterine fibromyoma was made. An emergency laparotomy was done, as the patient had a fresh and heavy bout of bleeding. On opening the abdomen by a right paramedian incision, the uterus was found to be enlarged to 32 weeks' size, nodular with cord-like extensions into right tube, broad ligament and infundibulopelvic ligament with an adherent appendix. Left tube and ovary were normal. Total hysterectomy with bilateral salpingo-oophorectomy and appendectomy were done and abdomen closed in layers.

Cut section confirmed the diagnosis with the typical "turkish towel" effect, the worm-like cords, the peculiar coarse white tissue with elastic rubbery consistency.

Histopathological report further confirmed the diagnosis (Fig. 1). Masses of round and uniform spindle cells resembling stromal cells were seen within the uterine myometrium. Lymphatic spaces also contained the same cluster of cells. Both the tubes and the ovaries were normal. The endometrium was in the proliferative phase.

The patient had a smooth post-operative period and was discharged on 12-10-1970. She was re-admitted after one month for a course of Cobalt therapy. The patient is being followed up every fortnight and does not show clinical signs of metastasis.

Comments

In retrospect it is interesting to speculate on the following pointers:—

(1) No age or parity is specific in the diagnosis of this condition. The vast majority of cases have been reported between 30 and 50 years, the youngest being 22 years and oldest 68 years of age (Masani, 1966). This indicates that stromatosis can occur after menopause and is not ovarian dependent.

(2) The commonest symptom reported in all the cases is abnormal uterine haemorrhage like metrorrhagia, or even postmenopausal bleeding, pelvic pain and enlargement of abdomen. The case reported had this triad of symptoms but

amenorrhoea preceding the bleeding episode was misleading.

(3) A long period of infertility has been observed by many workers, (Reddy). In this case also there was an interval of 12 years, from last childbirth.

(4) Although gross appearance is suggestive of stromatosis because of the worm-like rubbery bands, diagnosis must be made to exclude the benign counterpart adenomyosis and the malignant sarcoma. The cells, though they infiltrate and show metastasis, do not have malignant features. Hence, clinically stromatosis mimics fibromyoma and adenomyosis and histologically sarcoma. Park regards this as a low grade sarcoma. Novak stated that the course of the disease is slow and the outcome fatal as the extensions are difficult to eradicate. The border line between the benign and malignant is intriguing. Pinto observed that in the younger age it was benign with better prognosis. Norris and Taylor distinguished between benign and malignant infiltrating variety. Goodall also observed that unfiltration was more when the uterine size and shape were drastically altered.

5. In view of the local extension into the broad ligament, bladder, rectum and to the lateral pelvic walls, the growth sometimes is difficult to eradicate completely. But in this case complete removal was possible as extensions were surgically removable. If complete eradication by surgery is not possible postoperative radiation must be given which promises a cure in some cases, (Corscaden 1962) and temporary regression in some. (Stearns 1958). Pinto, after reporting two cases, stated that radical surgery with post operative radiotherapy gives better results. In this case also postoperative cobalt therapy was given and the patient is doing well. However, a guarded prog-

nosis should be given and the patient must be followed up meticulously.

Summary

A case of stromal endometriosis of the uterus has been reported, with a brief review of the literature. The establishment of the final diagnosis is by correlation of the histopathological findings with the clinical features.

Acknowledgement

My thanks are due to Dr. L. Rajalakshamma, Vice Dean, Vani Vilas Hospital, for giving me permission to report this case. I must also thank Dr. Govinda Rao, Associate Professor of Pathology, Bangalore Medical College, for the histopathological report.

References

1. Aron, S. B. and Pasricha, K.: J. Obst. & Gynec. India, 20: 5, 686, 1970.
2. Casler, D. W. B.: Quoted by Aron et al.
3. Corscaden, S. A.: Gynaecological Cancer ed. 3: 404, 1962.
4. Doran, A. H. G. and Lockyer: Quoted by Lewis.
5. Embrey, M. P.: J. Obst. & Gynec. Brit. Emp. 59: 846, 1952.
6. Goodall, J. R.: J. Obst. & Gynec. Brit. Emp. 47: 13, 1940.
7. Howkins, J.: Shaw's Text Book of Gynec. ed. 8 J & A Churchill 739—1962.
8. Hunter, W. C. and Lettiq, G. J.: Am. J. Obst. & Gynec. 75: 258, 1958.
9. Kosslg Spiro, R. H. and Brunshwig, A.: Surg. Gynec. & Obst. 121: 531, 1965.
10. Lewis, T. L. T.: Progress in clinical Obst. & Gynec. ed. 2 Churchill 531, 1965.
11. Kumar, D. and Anderson, W. J.: Obst. & Gynec. Brit. Emp. 65: 435, 1958.
12. Masani, K. M.: Text Book of Gynec. ed. 5: 350, 1966.
13. Mangalik, K. P. and Wahal, K. M.: J.I.M.A. 23: 41, 1953.
14. Norris, H. J. and Taylor, H. B.: Cancer. 19: 775, 1966.
15. Novak, E. R. and Woodruff, J. D.: Gynec. & Obst. Pathology ed. 6: 234, 1967.
16. Park, W. W.: J. Obst. & Gynec. Brit. Emp. 56: 759, 1949.
17. Pedowitz, P., Felmer, L. B. and Grayzel, M. M.: Am. J. Obst. & Gynec. 69: 1309, 1955.
18. Pinto, R. Y. and Krishna, K. K.: J. Obst. & Gynec. 13: 137, 1963.
19. Rao, K. S. and Kanakadurgamba, K.: J. Obst. & Gynec. India. 13: 137, 1963.
20. Reddy, D. B., Rao, K. V. and Ramanamma, V. J.: J. Obst. & Gynec. India. 17: 329, 1967.
21. Stearns, H. C.: Am. J. Obst. & Gynec. 75: 663, 1958.

See Fig. on Art Paper VI