LEIOMYOMA OF THE VAGINA

(A Case Report)

by

P. R. BATLIWALLA,* M.D., D.G.O.

and

S. P. MEHTAJI,** M.D.

Although leiomyoma is the most commonly encountered tumour in the uterus, its vaginal location is rare. Not more than a passing mention is made of it in the standard text books. The tumour is generally accepted to arise from muscle tissue, hence the term myoma, or more exactly leiomyoma, though it has been described as fibroma, myofibroma, fibromyoma or fibroid. As regards its aetiology, it has been postulated that embryonal rests, the local artery musculature or the recto-vaginal septum are origins of the tumour. The condition is clinically unimportant, but it frequently gives rise to errors in clinical diagnosis. The first description of a fibrous tumour of the vagina is attributed to Denys de Leyden in 1733. Bennett and Erlich (1941) stated that not more than 200 authentic cases had been described in the world literature. According to them, the subject was first reviewed by Kleinwachter in 1882, who reported 53 cases. However, the only comprehensive reports appearing in the American or English literature were published by Phillips in 1899 and by R. R. Smith in 1902. Bennett and Erlich have further stated that Nurnberger critically reviewed the world literature in 1930 and considered only 130 cases of myoma of the vagina to be well authenticated. But, in contrast with this conservative estimate, Tourneux in 1934 stated that about 300 authentic cases have been reported. Bennett and Erlich, on reviewing their files from the Gynaecological Dept. of the Johns Hopkins Hospital for the past 50 years, found only 9 cases of primary myoma of the vagina, which they have reported, along with 3 additional cases from the private files of T. S. Cullen, R. W. Te Linde and Emil Novak. Since then, less than 50 additional cases have been reported (Asher and Purandare, (1969); Bennett and Erlich, (1941); Jhaveri, Saraf and Talsania, (1969); Kettle and Loeffler, (1965); Marcus, (1966); Narayan Reddy, (1966) and Schram (1958). It may be that many observed cases are not reported, as the condition, though rare, is often unimportant.

A case of leiomyoma of the vagina encountered by us at the Cama and Albless Hospitals, Bombay, is reported.

Case History

The patient was a widow aged 60 years, para 4, gravida 6, was admitted with a history of almost continuous bleeding per vaginam for the last 2 to 3 months. She had stopped menstruating since the birth of her last child, about 20 years ago. The patient was fairly built and nourished, her blood pressure was 120/80 mm Hg and systemic examination did not reveal any abnormality.

On examination, there was a firm, sessile, non-tender, well-defined growth about 2½

From: Cama & Albless Hospital, Bombay-12.

**Honorary Assistant Obstetrician and Gynaecologist.*

***Honorary Obstetrician and Gynaecologist.*

Received for publication on 6-2-1973.

inches in diameter, arising from the lower one-third of the posterior vaginal wall, about 1 inch from the introitus. The lower pole, which was presenting at the introitus, was ulcerated and necrotic friable tissue could be seen which bled freely on touch. The cervix which was seen high up in the vagina, was perfectly healthy.

On vaginal examination, the cervix felt normal, the uterus was small and atrophic and the fornices were clear.

By a rectal examination the growth could be felt through the anterior rectal wall, but the rectal mucosa was free.

Her haemoglobin was 11 gms%; fasting and post-prandial blood sugars were normal and routine urine examination did not reveal anything abnormal.

Since the surface of the tumour was ulcerated, necrotic and bled easily, a biopsy of the growth was done. This revealed a well-differentiated benign leiomyoma. The tumour was enucleated under spinal anaesthesia, and the defect in the vaginal wall was sutured with interrupted catgut stitches.

After enucleation, the tumour was found to be spherical, 2½ inches in diameter, and firm in consistency. The cut surface had a typical whorled appearance.

Microscopically, the sections of the tissue showed a lining of squamous epithelium, which was ulcerated in one region. In the region of the ulcer, necrotic material, dense polymorphonuclear infiltration and granulation tissue, were seen. Below the epithelial lining a compressed zone of collagen was seen forming a capsule around the tumour. The tumour was formed of elongated spindle-shaped cells in a whorled arrangement. Small areas of necrosis and hyaline degeneration were present. The histological diagnosis was leiomyoma of the vagina showing necrotic and inflammatory changes.

Discussion

Vaginal leiomyoma generally occurs in white parous women between the ages of 35 and 50 years, though examples in infants and elderly women have been described. According to Narayan Reddy, however, Negro women appear to be more prone to it than the white. There appears to be no correlation between the occurrence of myomas in the vagina and in any other site. On macroscopic examination, the tumour is well encapsulated and the cut surface shows the typical whorled appearance. Histologically, it consists of varying proportions of smooth muscle and fibroblasts. It can undergo all the degenerative changes which may occur in a uterine fibroid. Malignant change is possible, and even malignant recurrence after removal of a benign tumour has been reported.

Pregnancy has little effect on the tumour, apart from increased vascularity. Over 50% of vaginal fibromyomata occur in the anterior vaginal wall. The next commonest site is the posterior wall, and the least common the lateral wall Bennett and Erlich (1941). They are usually single and sessile and measure about 1 to 2 inches in diameter, though an occasional large one has been reported. The overlying mucosa is usually intact, but can ulcerate and slough off and the growth may then simulate a malignant neoplasm.

The symptoms vary according to the size and site of the tumour. The patient may complain of leucorrhoea, heaviness in the vagina or dyspareunia or there may be constipation or urinary symptoms e.g. dysuria, frequency or retention of urine. Quite often these tumours are asymptomatic and may only be detected on routine vaginal examination or during the course of examination for some other condition. Quite often the diagnosis is not established before operation, especially if degenerative changes have made the tumour feel cystic.

The differential diagnosis has to be made from the much more common

gynaecological lesions such as cystocoele urethrocoele, urethral diverticulum, rectocoele, inclusion cysts, Wolffian duct remnants and also from carcinoma of the vaginal wall.

The treatment consists of enucleation after making an incision on the vaginal wall over the tumour, and then repair of the vaginal wall.

Summary

A case of vaginal leiomyoma is reported. The literature is reviewed, and its aetiopathology, clinical features, diagnosis and treatment, have been discussed.

Acknowledgement

We are thankful to the Superintendent, Cama and Albless Hospitals, Bombay-1 for allowing us to present the hospital data.

References

1. Asher, L. I. and Purandare, B. N.: J. Obst. & Gynec. India. **19**: 536, 1969.
2. Bennett, H. G. and Erlich, M. M.: Am. J. Obst. & Gynec. **42**: 314, 1941.
3. Denys de Leyden: As quoted by Kettle, M. J. and Loeffler, F. E. in Am. J. Obst. & Gynec. **92**: 574, 1965.
4. Jhaveri, A. A., Saraf, A. N. and Talsania, B. C.: J. Obst. & Gynec. India. **19**: 261, 1969.
5. Kettle, M. J. and Loeffler, F. E.: Am. J. Obst. & Gynec. **92**: 574, 1965.
6. Marcus, J. L.: J. Obst. & Gynec. British Commonwelath. **73**: 1013, 1966.
7. Narayan Reddy, K. S.: J. Obst. & Gynec. India. **16**: 342, 1966.
8. Schram, M.: Obst. & Gynec. **12**: 195. 1958.