FIBROMYOMA OF THE VAGINA

by

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Fibromyoma of the vagina is of interest because of its rarity and for the unusual problems which may arise regarding diagnosis. Denys de Leyden in 1933, reported first case and by 1941 not more than 200 established cases had been described (Bennet and Ehrlich, 1941). Few more cases have been reported since then (Marcus, 1966; Cheema, 1971). Three cases of this condition personally encountered are reported.

CASE I

Mrs. H. K. 30 years, P4 + 1 + 0 + 4 was admitted on 8-11-68 with the complaints of irregular vaginal bleeding of 4 months' duration. Her previous menstrual history was unremarkable. The last premature childbirth was by L.S.C.S., 4 months back. At that time the tumour was felt blocking the vagina, but its exact site of origin could not be diagnosed and she was advised operation after 3 months.

Systemic examination revealed nothing abnormal. On vaginal examination 3"×3" sized tumour with 1" thick pedicle was felt arising from the middle third of the anterior vaginal wall, firm in consistency, but with an ulcerated surface. The cervix, uterus and adenexa were normal. The tumour was easily enucleated.

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Pathology

Gross: The tumour was 3"×3", firm in consistency. Cut surface showed typical whorled appearance.

Histological Report: Section of the tumour showed morphological features consistent with fibromyoma. There were areas showing interstitial oedema and hyaline degeneration.

CASE II

Mrs. V.D. 23 years, a case of primary sterility was admitted on 13-5-71 with a history of irregular bleeding per vaginam for the last 5 months. She was admitted in Kangra Hospital on 12-4-71 with acute retention of urine. On 22-4-71 a laparotomy was done for a mass in the lower abdomen, but the abdomen was closed as the mass was thought to be retroperitoneal with the bladder adherent over it anteriorly.

Her previous menstrual history was normal.

General physical examination revealed nothing abnormal except marked pallor.

Abdominal examination showed midline suprapubic laparotomy scar and a firm mass with restricted mobility in the hypogastrium, arising out of the pelvis and extending upto 2" above the symphysis pubis. There was no evidence of another mass or ascites.

Pelvic examination revealed 5"×4" dumb-bell shaped mass filling most of the vagina and arising from the anterior and right vaginal walls. It was firm in consistency and had a smooth surface. The cervix and uterus could not be defined properly. The examination provoked moderate amount of bleeding.

Investigations: Haemoglobin 6 gm%, Urine N.A.D., X-ray chest normal.

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The cut surface is soft whitish or grevishwhite with foci of cystic degeneration or necrosis. Microscopic structure is characterised by a discrete network of spaces lined by cuboidal epithelium into which papillary projections protrude. The papillary projections are supported by a delicate connective tissue stroma and shows thin walled capillaries and it is covered by a single layer of high cuboidal or columnar cells. This appearance is described sometimes as 'glomerulus like'. Formation resembling alveolar structure without papillary pattern tending to form a system of communicating channels may be seen. Suggestion of mucoid production is seen in PAS positive droplets in the alveolar spaces. The present case in the young girl showed all the characteristic features, both macroscopic and microscopic of endodermal sinus tumour. Section from multiple blocks of the tumour showed no evidence of teratomatous elements.

The prognosis of endodermal sinus tumour is uniformly bad in cases below the age of 2 years. Both the cases who died in those reported by Pierce et al (1970) were below the age of 2. The extragonadal endodermal sinus tumour reported by Thiele et al, (1971) who died of extensive secondary deposits, was a child of 14 months. In the present case even though the tumour was well encapsulated at the time of removal, must have

produced definite metastases as evidenced by the presence of malignant cells in the peritoneal fluid.

Conclusion

A case of "endodermal sinus tumour" (Yolk sac tumour) in a child of 1½ years is described. The pathology of the condition is briefly discussed.

References

- Allyn, D. L., Silverberg, S. G. and Salzberg, A. M.: Cancer. 27: 1231, 1971.
- Bestle, J.: Acta. Path. Microbiol. Scand. 74: 214, 1968.
- 3. Duval, M.: Quoted by Thiele et al. Cancer 27: 391, 1971.
- Huntington, R. W. and Bullock W. K.: Cancer. 25: 1357, 1970.
- Kazancigil, T. R., Lacquer, W. and Ladewig, P.: Am. J. Cancer. 40: 199, 1940.
- Pierce, G. B., Bullock, W. K. and Huntington, R. W. Jr.: Cancer. 25: 644, 1970.
- Schiller, W.: Am. J. Cancer, 25: 1, 1939.
- Scully, R. E.: Clinicopathological conference, Case 34, 1969, N. Eng. J. Med. 8: 434, 1969.
- 9. Tielmann et al.: Quoted by Thiele et al. Cancer. 27: 391, 1971.
- 10. Teilum, G.: Cancer. 12: 1092, 1959.
- 11. Thiele, J., Castro, S. and Lee, K. D.: Cancer. 27: 391, 1971.

3 units (900 ml) blood was given preoperatively to improve her general condition.

Examination under anaesthesia confirmed the same findings. The cervix was felt high up, small and separate from the vaginal tumour. The uterus was retroverted firm and nulliparous in size. Under the same anaesthesia abdominal approach was selected because of the high extension of the mass and it was considered that better control of the bleeding could be secured per abdomen. On laparotomy the uterus was found to be sitting on the tumour and bladder was stretched over it with tortuous veins. Both adenexae were normal. The uterovesical pouch was opened and bladder reflected down. The round ligament was divided and right broad ligament opened. The uterine artery on this side was clamped and cut to secure the feeding vessels. The vagina was opened transversely and the tumour enucleated. The vagina was closed after complete haemostasis. Postoperative period was uneventful. Continuous drainage of bladder was kept for 48

Pathology: Gross: An irregular firm mass 5"×4" with cut surface showing typical whorles.

Histological Report: Multiple sections of the tumour showed it to be a myoma with oedema and degeneration. There was no evidence of malignancy.

CASE III

Mrs. S. K., 36 years, P3 +0+0+3 was admitted on 12-6-71 with the complaints of a mass coming out of the introitus for the last 20 days and urinary incontinence for the same duration. Menstrual history was normal.

Local examination revealed an ulcerated growth 3"×2" coming out of the introitus, external urethral meatus was wide and patulous. The urethra was stretched over the mass.

On internal examination the mass was found to be arising from the lower 1" of the anterior vaginal wall and the cervix quite high up. The uterus and adenexa were normal. Bladder sound did not go into the swelling. The tumour was enucleated easily without any injury to the

urethra. Post-operatively there was full control over the micturition.

Pathology: Gross: Irregular lobulated surface showing yellowish areas of necrosis. Cut surface showed whitish homogenous areas.

Histological Report: Fibromyomatous polyp showing myxomatous degeneration with infection.

Discussion

The three cases presented here illustrate the fact that these rare vaginal tumours occur in child bearing age, although occasional tumours in infants and in the elderly patients have been described. Variable symptomatology may lead to errors in clinical diagnosis. In the second case provisional diagnosis of cervical fibroid was made and in the third case the house surgeon mistook the tumour for a prolapse of the uterus. Symptoms depend upon the size, site of tumour and whether surface ulceration is present or not. The first two cases presented with irregular vaginal bleeding. Subjects with bigger and anterior tumours can have urinary disturbances. The second case reported here had retention of urine and the third one had false incontinence. Posterior tumours known to give rise to constipation. Small tumours may be asymptomatic and are detected accidentally at the time of a vaginal examination. 50% of the vaginal myomas arise in the anterior vaginal wall (all the three reported), next common site is posterior wall and least common is lateral wall (Bennet and Errlich, 1941). They vary in size from $\frac{1}{2}$ " \times $\frac{1}{2}$ " to $5'' \times 4''$ as reported in the second case. They may be sessile or pedunculated. In most cases the enucleation by the vaginal route is possible, but in some cases when the tumour is large, arising high up and is not pedunculated and posing

difficulty in diagnosis, the abdominal route may have to be resorted to. This is illustrated by the second case where vaginal attempt was considered hazardous and bleeding was controlled by preliminary ligation of the uterine artery on the right side. These tumours may show various degenerations, oedema and infection. Sarcomatous change has been reported in 2 cases (Tracy 1930, Schram, 1958).

Summary

Three cases of myoma of the vagina are

reported with illustration of problems posed in diagnosis and management.

References

- Bennett, H. G. and Erlich, M. M.: Am. J. Obst. & Gynec. 42: 314, 1941.
- Cheema, T. S.: J. Obst. & Gynec. India 21: 254, 1971.
- Leyden, de Denys (1933): Quoted from Am. J. Obst. & Gynec. 42: 314, 1941.
- Marcus, J. L.: J. Obst. & Gynec. Brit. Cwlth. 73: 1013, 1966.
- Schram, M.: Obst. & Gynec. 12: 195, 1958.
- 6. Tracy, S. E.: Amer. J. Obst. & Gynec. 19: 279, 1930.