

Paraurethral Vaginal Leiomyoma : A Case Report

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Abstract : *Vaginal leiomyoma is a rare solid tumour. The majority of these tumours occur in the midline of the anterior vaginal wall. The tumours are often asymptomatic but can cause dysuria, urinary frequency, urinary retention, dyspareunia and vaginal bleeding. This report describes a case of paraurethral vaginal leiomyoma. Simple excision is usually adequate treatment. (Thai J Obstet Gynaecol 1992;4: 59-62.)*

Key words : leiomyoma, vaginal tumour, female urethra

Paraurethral vaginal leiomyoma is a rare solid tumour and is often mistaken for cystocele, urethrocele, Skene's duct abscess, Gartner's duct cyst, urethral diverticula, vaginal cyst and vaginal malignancies. Since the first documented case was described in 1733 by Denys de Leyden⁽¹⁾ less than 250 cases have been recorded.

A case of asymptomatic paraurethral vaginal leiomyoma is presented. The clinical aspects, pathologic features and treatment of this rare vaginal tumour are reviewed.

Case Report

Mrs KH, a 39-year-old multiparous Chinese woman, reported with

a history of gradually enlarging painless mass per vagina of 6 months duration. She was asymptomatic. Systemic examination was normal.

On physical examination, an apparently cystic, 4x3x3 cm mass was palpable arising in the suburethral region occupying the lower part of the anterior vaginal wall. The mass appeared to be continuous with the urethra. On palpation there was a partly cystic, partly solid mass 4x3x3 cm posterior to the urethral opening. The mass was fixed, circumscribed, nontender, non-compressible and with pressure no urethral discharge was obtained (Fig. 1). Speculum examination showed the cervix to be normal, with minimal mucoid discharge. Per



Fig. 1 Preoperative view. Typical suburethral, midline, anterior vaginal wall tumour.

vaginum, the uterus was normal size, mobile, anteverted and adnexae were normal. Urine analysis, complete blood count, ECG, chest X-ray were normal. Because of the uncertainty of what this mass represented, the patient elected to have surgical removal.

An excision was done through a small transverse vaginal incision. The oval circumscribed mass 4x3x3 cm was totally enucleated from the paraurethral structures with a urethral catheter in place. The wound was closed with absorbable sutures; the

vagina was packed; and the urethral catheter was removed. The procedure was performed in the Out-patient Surgery Department. Her immediate postoperative course was unremarkable, and she was discharged 2 hours after the procedure.

Pathologic examination revealed a 4x3x3 cm, well-circumscribed mass that weighed 30 g. The mass was ovoid, firm and elastic in consistency and white. Sections through it showed pearly tissue, with the typical appearance of whorled bundles of smooth muscle fibers. The microscopic appearance of the mass consisted of anastomosed and whorled fascicles of fusiform cells of uniform size. The nuclei were elongated and mitoses were not frequent. Blood vessels were small and not numerous. Between the bundles of smooth muscle fibers were variable amounts of fibrous connective tissue (Fig. 2).

Discussion

Vaginal leiomyomas are exceedingly rare tumours that are often discovered as asymptomatic masses. It arises anywhere within the vagina, although most often on the anterior wall. The symptoms depend upon tumour size and location. If the tumours are near the urinary tract, associated symptoms such as frequency, urgency, dysuria and urinary retention may be present. This tumour may be any size from extremely small to large enough to occlude the vaginal canal. Vaginal leiomyomas are more com-

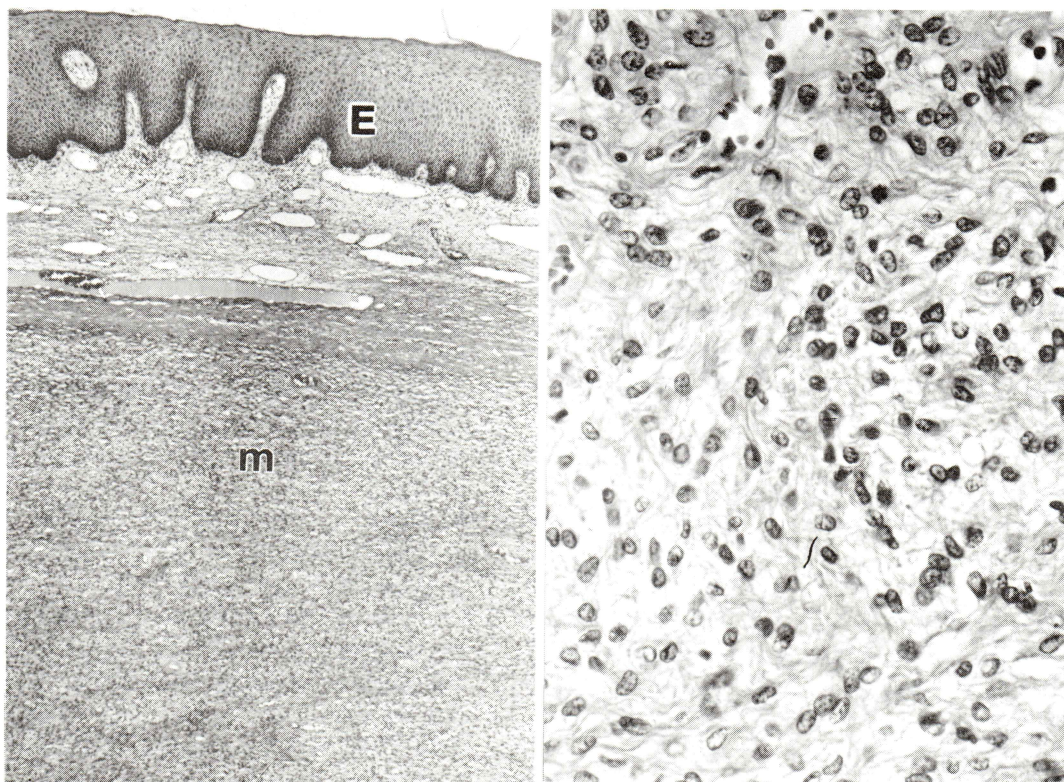


Fig. 2 Left : Low magnification reveals a well demarcated mass (m) which is located beneath the squamous epithelium (E). Right : Higher magnification of the mass reveals interlacing bundles of smooth muscle cells (H and E, x 10 and x 40).

mon in white women, whereas, the frequency of uterine leiomyoma in black women is relatively high⁽²⁾.

Exact aetiology of development of this lesion is still not known although an endocrinal influence has been suspected⁽³⁾. Vaginal leiomyomas have been found associated with uterine leiomyomas, but there does not appear to be any correlation. On rare occasions, vaginal leiomyomas have been reported to be multiple and associated with leiomyomas of other organ systems⁽⁴⁾.

The typical pattern of whorled

bundles of smooth muscle fibers and fibrous tissue is homogeneous and gray-white in appearance. The vaginal mucosa is not involved, and the tumour can be separated easily from surrounding tissues. The same degenerative changes observed in leiomyoma elsewhere may also be seen, but rarely, leiomyosarcomas have been reported to arise from vaginal leiomyomas⁽⁵⁾.

Simple excision is usually adequate treatment and can be done on an out-patient basis⁽⁶⁾. Caution should be exercised to prevent injury to the

urethra, bladder and rectum. A urethral catheter can help dissection and prevent urethral injury. Prognosis is excellent, only two cases of recurrence have been reported in the literatures⁽⁷⁾. When clinical findings are equivocal and differentiating one from another is impossible, histopathological examination of all paraurethral lesions excised would reveal further cases of this entity.

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References

1. Bennett HG Jr, Ehrlich MM. Myoma of the vagina. *Am J Obstet Gynecol* 1941;42: 314-20.
2. Liu MM. Fibromyoma of the vagina. *Eur J Obstet Gynecol Reprod Biol* 1988;29: 321-8.
3. Rao KD JCR, Nalini V. Leiomyoma of the female urethra-a clinical curiosity. *Int J Gynecol Obstet* 1989;28:381-3.
4. Brown RC, Hawtrey CE, Rose EF. Leiomyoma of the vesicovaginal septum causing urinary retention. *Urology* 1975;6:379-81.
5. Miyakawa I, Yasuda H, Taniyama K, et al. Leiomyosarcoma of the vagina. *Int J Gynecol Obstet* 1985;23:213-6.
6. Castle WN, McLaughlin WL. Paraurethral vaginal leiomyoma. *Urology* 1987;30:70-2.
7. Ingemanson CA, Alfredsson J. Recurrent fibromyoma of the vagina : A case report. *Acta Obstet Gynecol Scand* 1970;49:271-3.