

Vaginal Leiomyoma: A rare cause of Menometrorrhagia

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Citation

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Abstract

Primary vaginal tumors are rare. They are usually secondary to either cervical or vulval lesions. The benign solid tumors arising from the vaginal tissue include papilloma, hemangioma, mucous polyp and rarely Leiomyoma. In the vagina, leiomyoma usually presents as a solid single nodule mostly from anterior vaginal wall in women between the ages of 35-50 years. We present a case report of a 26 year old multipara female patient who presented with menometrorrhagia of 2 months duration. On ultrasound examination she was found to have a large hypoechoic mass within the vagina which was diagnosed as a pedunculated cervical fibroid. Thereafter MRI was performed which revealed a diffusely enhancing well defined mass lesion of signal intensity similar to myometrium within the vagina. Per-operatively the mass was confined to the vagina and a diagnosis of vaginal leiomyoma was made confirmed by histopathology.

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INTRODUCTION

The vaginal leiomyoma is a rare solid tumor with variable clinical presentation. ^{1,2} Bennett and Ehrlich ³ found only nine cases in 50,000 surgical specimens, and only one case in 15,000 autopsies reviewed at the John Hopkins Hospital. Although rare, the most common mesenchymal neoplasm of the vagina is the leiomyoma. ⁴

CASE REPORT

A 26-year-old with two previous pregnancies, presented with complaints of menometrorrhagia and white discharge per vaginum for 2 months. Her previous menstrual cycles were regular and last delivery was 2 years back. There was no history of CuT or oral contraceptive use. General physical and other systemic examination was normal.

On per speculum examination a smooth firm globular mass of 8 cm x 6 cm was seen occupying the whole of the vagina. The examining finger could not reach the upper limit of this mass and the base of the growth could not be identified on bimanual palpation. Abdominal ultrasonography (transvaginal sonography was not possible) revealed a large hypoechoic, well-defined mass in the region of vagina and was diagnosed as pedunculated cervical fibroid extending into the vagina. (Fig 1) The endometrial thickness was 8 mm and there was no other growth in the uterus. On Magnetic Resonance Imaging (MRI) examination a large well-defined

mass was seen in the region of vagina hypointense on both T1-weighted T2-weighted images. Few areas of necrosis were seen within the lesion as areas which were hypointense on T1-weighted images and hyperintense on T2-weighted images. (Fig 2,3) Posterior vaginal wall was thinned out with loss of fat planes with the rectum. Parametrial P tissue was otherwise normal. On contrast enhanced images diffuse enhancement was seen. (Fig 4) Excision and enucleation was performed via transabdominal route. Per-operatively the tumor was found to be primarily vaginal in location with no evidence of infiltration into surrounding structures. Histopathology revealed a benign vaginal leiomyoma.

Figure 1

Figure 1: Sagittal ultrasound scan of the uterus reveals a large, well-defined hypoechoic lesion in the region of vagina.



Figure 2

Figure 2: Axial T2-weighted MR scan through the region of vagina reveals large well defined hypointense lesion in the lumen of vagina. Wall of vagina is well defined with no evidence of any infiltration. Few areas of cystic necrosis are seen within the lesion as hyperintense areas.

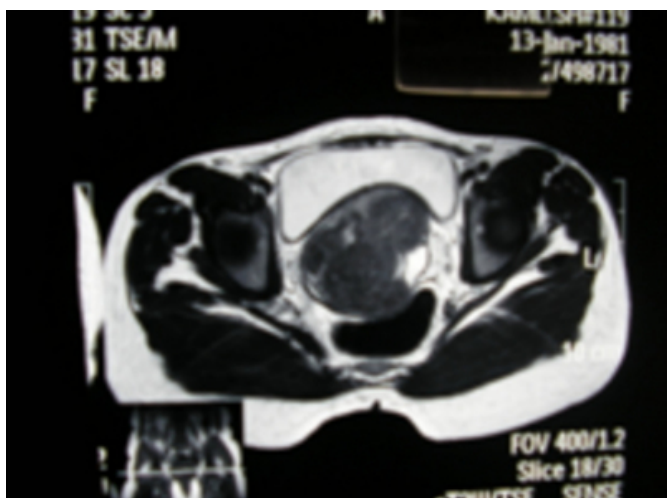


Figure 3

Figure 3: Sagittal T1-weighted MR scan reveals a large hypoechoic mass in the lumen of vagina. The posterior lip of cervix is displaced anteriorly.

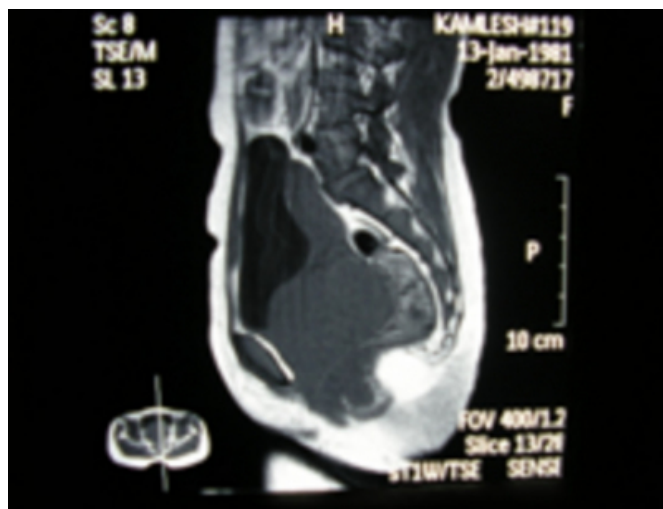
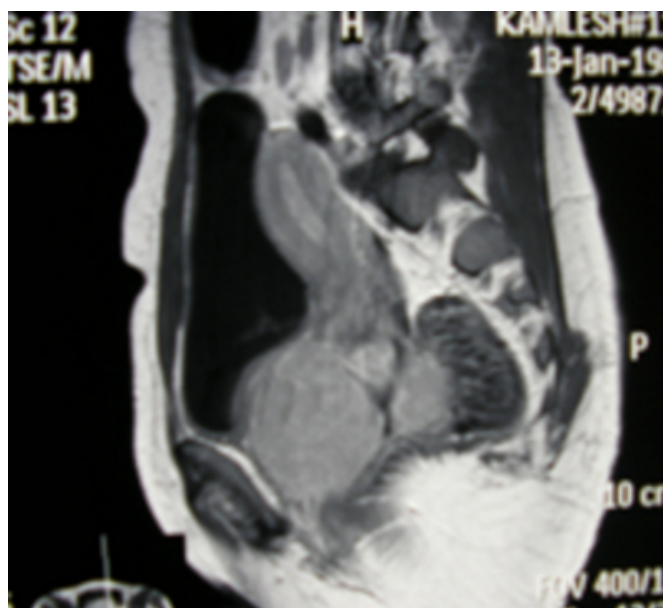


Figure 4

Figure 4: Contrast enhanced T1-weighted sagittal MR scan reveals diffuse enhancement of the vaginal lesion.



DISCUSSION

The majority of leiomyomas arise from the body of the uterus and sometimes from cervix. The extrauterine sites of this tumor are round ligament, uterosacral ligament, ovary, inguinal canal and very rarely vagina and vulva. Since the first report by Denys de Leyden in 1733, approximately 300 cases of vaginal leiomyoma have been reported worldwide.

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The solid tumors arising from the vaginal tissue include

papilloma, hemangioma, mucus polyp and rarely leiomyoma. In the vagina, leiomyoma usually present as a solid single nodule mostly from the midline anterior wall, ^{5,6} and less commonly, arise from the posterior and lateral walls. ⁷ These are most common in women aged 30-50years. ^{5,7} Although these tumors are often asymptomatic, larger tumors may be associated with pain, dystocia, dyspareunia or obstructive urinary symptoms. ⁸

Pathologically they are firm, well circumscribed homogenous and resemble their uterine counterpart. Though the lesion is usually regarded as benign, sarcomatous changes have been reported ⁹

These may be either intramural or pedunculated. ⁷ Ultrasonography usually diagnoses it to be a cervical fibroid. ¹ On MRI these are typically round, well-circumscribed, whorl-appearing masses of intermediate T1W and T2W signal intensity, which homogenously enhances after gadolinium administration. ¹⁰ Like uterine leiomyoma, however, vaginal leiomyomas can show various signal intensities on MR images, depending on histopathologic changes that have occurred. ⁶ leiomyomas should be differentiated from leiomyosarcomas. The latter characteristically appear irregular and locally infiltrative, heterogenous with areas of necrosis or hemorrhage, and demonstrate high signal intensity on T2W sequences. ¹¹

Excision and enucleation is the treatment of choice ² as was done in our patient.

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