

Female urethral leiomyoma a mimicker of caruncle: A case report

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Abstract: Benign tumors of urethra may emanate from any urethral compartment. Leiomyoma of female urethra arising from the smooth muscle and mostly presented in woman between 30-40 years and it is a rare tumor coming into different clinical views. Tumor size varies from 1 to 8 cm. The lesion is hormonally sensitive. Patients can present with a mass around urethra, urinary infection, dyspareunia and hematuria.

We report the first case of benign female urethral leiomyoma mimicking a caruncle in our department.

Key words: *Urethral leiomyoma, Female urethra, Spotting, Caruncle*

Introduction

Leiomyomas are benign neoplasm originating from smooth muscle cells and mostly presented in women between 30-40 years [1]. The most common sites in genitourinary system are bladder, kidney and urethra [2]. Although the most common benign lesion (not neoplasm) of urethra is Caruncle, the size of it is quite less than 1 cm and occurring generally in post-menopausal women. Thus despite clinical presentation, the age, size and for the most part pathologic investigation can be mainly useful and should be ensued after excised lesion.

Although it is a rare condition, it is more prevalent in women than men and tumor size varies from 1 to 8 cm. Because its growth may increase during pregnancy possible hormonal dependence is suggested [2].

Patients can present with a mass around urethra with urinary obstruction, urinary infection, dyspareunia and hematuria [1,2]

Case presentation

A 42-year-old woman complained about spotting from three months ago. On clinical examination a relatively well defined pretty easy-bleeding lesion was realized on urethral meatus. Incision was carried out after making clinical diagnosis of caruncle. On macroscopic examination it turned out to be a creamy-brown solid rubbery mass measuring 2/2×1/5×1 cm. Cut section showed homogeneous rather nodular creamy tissue with whorling feature. No hemorrhagic or necrotic foci were evident. There was also no sign of fibrovascular structure as you can

see in caruncle. Microscopic sections displayed interlacing fascicles of spindled benign smooth muscle cells [figure 1]. Trichrom stain revealed red cytoplasm of smooth muscle cells origin. Regarding immunohistochemical study these cells were positive for Desmin and Actin confirming smooth muscle origin [figure 2].

figure 1: leiomyoma, bland looking spindled cells.(H&E-10x)

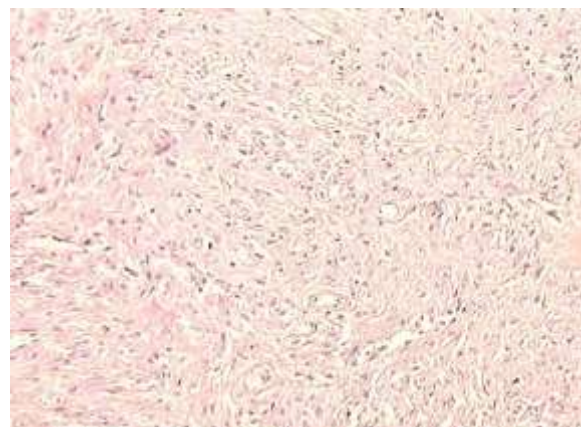
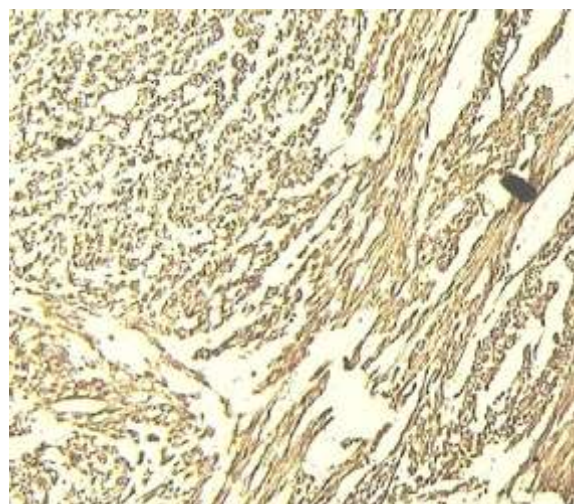


figure 2: leiomyoma, smooth muscle actin ,IHC staining(10x)



DISCUSSION

Leiomyoma's of urethra are uncommon condition originated from benign smooth muscle cells. The most common site of involvement is proximal segment of urethra especially in young women[5-9]. Being conditions like skene's gland cysts, Mucosal prolapse, Vaginal cyst hamartoma, caruncle, urethrocele, urethral diverticulum and urethral malignancy are in differential diagnosis [1,2]. Other benign solid tumors such as papillomas, and polyps are just less prevalent than leiomyoma. Neurofibroma and adenoma should also be taken into consideration as differential diagnosis.[6]. Urethral leiomyoma ought to be differentiated from paraurethral one in which excision is done without muscular or mucosal injury[10]. As a result excision and histopathology are needed to differentiate it from other benign and malignant tumors [2,4,11].

Although the most common benign lesion (not true neoplasm)of urethra is Caruncle , the size of it is quite less than 1 cm and occurring generally in post-menopausal women[1,2,8,9] .Thus despite clinical presentation ,the age , size and for the most part pathologic investigation can be mainly useful and should be ensued after excised lesion.

Although radiologic study is not used routinely at the first place, urothrosopy of lower urinary tract as a primary clinical evaluation to differentiate them from urethral diverticula, urethrocele and caruncle [10]. Furthermore, microscopic examination is necessary to rule out malignancy [12]. Nowadays ,transvaginal sonography and MRI help us determine the exact benign nature of the tumor [13]. As far as we are concerned, no malignant transformation or recurrence after surgical excision of urethral leiomyoma is found [14-17].

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