Case Report

Urethral Caruncle: A Rare Case Report and Management Strategies

Jaafar Fouimtizi, Omar Zineeddine*, Amine Slaoui, Tarik Karmouni, Khalid El khader, Abdellatif Koutani, Ahmed Iben Attya Andaloussi
Department of Urology B, Mohamed V University, Rabat, Morocco

Abstract

Introduction: Urethral caruncles are the most frequent benign tumors of the female urethra. The etiology and pathogenesis of urethral caruncle are not well understood but many theories have been proposed.

Case presentation: We report a case of a 72 years old woman with chief complain of pelvic pain. Physical examination revealed a polypoid lesion at the posterior lip of the distal urethral mucosa. The patient underwent a total excision of the urethral caruncle under regional anesthesia.

Conclusion: Urethral caruncle should be differentiated from other urethral lesions, such as urethral prolapse, periurethral gland abscess, or other benign or malignant neoplasm.

INTRODUCTION

Urethral caruncles are the most frequent benign tumors of the female urethra, typically presenting as a red fleshy and easily friable nodule of the posterior urethra near the meatus in postmenopausal women [1]. It can be asymptomatic or can be associated with various symptoms and signs such as pain, vaginal bleeding, haematuria and bladder outlet obstruction [2].

CASE

We report a case of a 72 years old woman P4A0 with history of hypertension, ischemic heart disease and gastric ulcer with chief complain of pelvic pain in the past month. She also complained of a bulging sensation felt at her vagina.

Physical examination revealed a polypoid lesion at the posterior lip of the distal urethral mucosa (Figure 1).

Total excision of the urethral caruncle was performed under regional anesthesia (Figure 2). The urethral meatus was then sutured with 3–0 absorbable sutures and 18 French (F) Foley silicon urinary catheter was placed in order to prevent stenosis and help urine drainage. The patient was then discharged while the mass was sent for histology examination. On the seventh day following the surgery, there were no complications found and the catheter was removed accordingly. The histopathologic result
followed: Ferrier in 1926, literature like pinching, snaring, ligating, cutting, cautery by heat, resection. Atypical appearances. Similarly, the lesion may recur after treatment, for those with uncertain diagnosis or those with large symptomatic lesions, failure to respond to conservative surgical intervention is traditionally reserved for women with anti-inflammatory agents and topical estrogen; however, carcinoma, melanoma, lymphoma, and sarcoma [8,9]. Various surgical techniques have been described in the literature like pinching, snaring, ligating, cutting, cautery by heat, destruction with chemicals and fulguration. Novak in 1926, proposed that urethral caruncles are caused by postmenopausal shrinkage of vaginal tissue with secondary changes occurring due to altered environmental conditions [5].

The etiology and pathogenesis of urethral caruncle are not well understood but many theories have been proposed. Dmochowski et al. hypothesized that urogenital atrophy due to oestrogen deficiency plays an important role in the development of urethral prolapse in postmenopausal women and may contribute to the development of urethral caruncle by a similar mechanism [4]. Novak proposed that urethral caruncles are due to altered environmental conditions [5].

The urethral caruncle is usually a benign, pedunculated, and highly vascular mass at the urethral meatus. Generally, small in size and asymptomatic at diagnosis. Though, it can cause distressing physical symptoms ranging from bleeding, pain, soreness, tenesmus and dysuria, either outflow obstruction or urinary retention [6,7].

Urethral caruncle should be differentiated from other urethral lesions, such as urethral prolapse, periurethral gland abscess, or other benign or malignant neoplasm. Although uncommon, a spectrum of neoplasms may mimic urethral caruncle clinically, including adenocarcinoma, urothelial carcinoma, squamous cell carcinoma, melanoma, lymphoma, and sarcoma [8,9].

Initial treatment can be conservative with medication such as anti-inflammatory agents and topical estrogen; however, surgical intervention is traditionally reserved for women with large symptomatic lesions, failure to respond to conservative treatment, for those with uncertain diagnosis or those with atypical appearances. Similarly, the lesion may recur after resection.

Various surgical techniques have been described in the literature like pinching, snaring, ligating, cutting, cautery by heat, destruction with chemicals and fulguration. Ferrier in 1926, formulated the principles and aims of the surgical technique as follows:

1. Complete eradication.
2. Restoration of the urethra to normal, avoiding stricture or pulling down of the bladder neck.
3. Preserving a specimen for histology.
4. Making the procedure simple and convenient with faster recovery.

In more recent literature, cystourethroscopy is recommended by most researchers prior to surgical intervention to rule out serious bladder and urethral abnormalities like carcinoma, diverticulum or abscess, when the cause of haematuria is uncertain [10].

CONCLUSION

Urethral caruncle is a rare condition primarily affecting elderly. Pathological examination is required to confirm the diagnosis because UC can be mistaken for a wide range of benign or malignant urethral lesions. Urethral caruncle is still a very poorly understood condition and the current literature is largely deficient. The most common method of surgical treatment encountered in these studies was simple excision.

DECLARATIONS

Ethics approval and Consent to participate

The ethics committee of the Faculty of Medicine of Rabat has given us its agreement. Informed consent to participate in the study was provided by the patient. The reference number is not applicable.

Consent for publication

The patient gave his informed and written consent for the publication of this work.

REFERENCES