

## Urethral Caruncle as a Cause of Acute Urinary Retention

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**Abstract:** We report of a 58 year old postmenopausal woman with urethral caruncle complicated with acute urinary retention. Pelvic examination revealed a 2x1 cm cystic mass on the lower 1/3 of the urethra. Excision and electrocautery of the mass was performed under general anesthesia. Urethral catheter was removed after 3 days from surgery and local estrogen therapy was began. The pathological examination confirmed urethral caruncle.

**Keywords:** Urethral caruncles, Urinary retention.

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### INTRODUCTION

Urethral caruncles are the most common benign tumors of the female uretra and occurring primarily in postmenopausal women [1]. Urethral caruncles are usually arise from the posterior lip of the urethral meatus and the etiology is still unknown [1] but is thought to be associated with estrogens deficiency [2]. It should be differentiated from Skene's gland cysts, and abscesses, Gartner's duct cysts, vaginal wall cysts, ectopic ureterocele, senile urethritis, infected urethral diverticulum, residual mullerian cysts and urethral-vaginal neoplasms [3].

They are usually asymptomatic and incidentally detected or may present with symptoms like painful voiding, urethral bleeding, increased urinary frequency, urgency, and appearance of a mass [3]. In this report we present a case of urethral caruncle as a cause of acute urinary retention.

### CASE REPORT

A 58 year old gravida 6 para 4 postmenopausal (for 10 years) woman was admitted to our emergency service with painful urinary retention since almost 10 hours. On her physical examination urinary bladder was palpable and pelvic examination revealed a 2x1 cm cystic mass on the lower 1/3 of the urethra (Fig. 1). A 16 f urethral catheter was administered to the patient and about 700 cc of urine was drained. On laboratory examination, complete blood count, the renal function tests and urinalysis were within normal limits. Excision and electrocautery of the mass was performed under general anesthesia. Urethral catheter was removed after 3 days from surgery and local estrogen therapy was began. The pathological examination confirmed urethral caruncle.



**Fig. 1:** Pelvic examination revealed a 2x1 cm cystic mass on the lower 1/3 of the urethra

### DISCUSSION

Urethral caruncles is an inflammatory nodule that arises at the posterior lip of the external meatus and is mostly seen after menopause [1]. The lesion consists of a connective tissue in the center and covered by either a urothelial or squamous epithelium [4]. Macroscopically, a caruncle can be pedunculated erythematous lesion that can bleed easily [1].

The symptoms of urethral caruncles are painful voiding, urethral bleeding, increased urinary frequency, urgency, and appearance of a mass [5]. In our patient urethral caruncle was complicated with acute urinary retention and it is a very rare complication of urethral caruncles.

Topical estrogen, anti-inflammatory agents or surgery are the treatment options for urethral caruncles. Large symptomatic caruncles, uncertain diagnosis, atypical appearances or failure to respond to conservative therapy are the indications for surgical

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excision. Histopathological diagnosis should be done cause it has been reported that carcinoma (1.6%) or Bowen's disease (0.8%) were found in patients with the preoperative diagnosis of urethral caruncles [1].

### **CONCLUSION**

In conclusion clinical suspicion based on history and physical examination are necessary for the diagnosis of urethral caruncles. Early diagnosis and treatment are essential to avoid potential complications.

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