

**ADENOCARCINOMA OF FEMALE URETHRA TREATED BY  
CHEMORADIOTHERAPY – A CASE REPORT**

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**ABSTRACT**

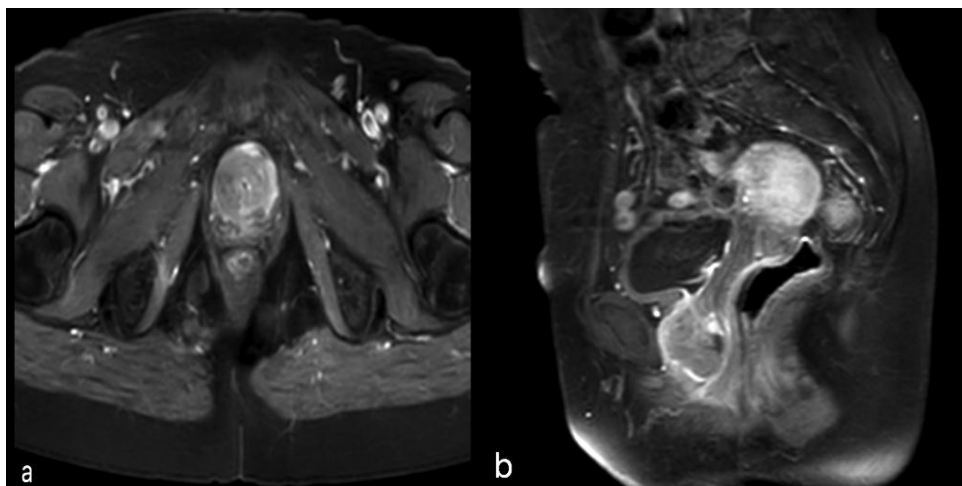
Primary urethral adenocarcinoma of the female is rare. Its management is particularly challenging owing to the paucity of evidence from randomised trials to inform practice. We report a case of adenocarcinoma of the female urethra, which were treated with concomitant cisplatin and radiotherapy. These case have shown benefit for concomitant chemoradiotherapy in urethral adenocarcinoma. It can be a promising alternative for surgery.

**KEYWORDS:** adenocarcinoma, chemoradiotherapy, female urethra.**INTRODUCTION**

Adenocarcinoma of the female urethra is an uncommon tumor lesion. The treatment strategy has never been established due to absence of prospective trials.

The treatment approaches includes radiation therapy, chemotherapy and surgery.

We report a case of female urethral adenocarcinoma treated by chemoradiotherapy.



**Fig. 1: Magnetic resonance imaging (MRI) showing a urethral mass with an enhancement of the mass and loss of fat plane between the urethra and vagina a: axial T1 b: sagittal T1.**

**CASE REPORT**

A 75-year-old woman presented with a 7-month history of intermittent hematuria. Physical examination revealed a firm mass on the vaginal anterior wall without clinically evident inguinal adenopathy. Pelvic MRI demonstrated a 3.5 cm enhancing proximal urethral mass with suspected invasion of the bladder neck and anterior vagina (Fig. 1). Initial staging CT scans did not show any evidence of adenopathy or distant metastasis. Cystoscopic biopsy revealed an adenocarcinoma of the

urethra. The patient received 46 Gy (2Gy/fractions) to the pelvis, including the inguinal lymph nodes by a four-field technique with 18-MV photons. An additional boost of 20 Gy (2Gy/fractions) was delivered to the urethral tumor by an anterior and posterior opposing fields associated with weekly Cisplatin at 40mg/m<sup>2</sup>. The patient tolerated radiation therapy well without any acute toxicities. 15 weeks after chemoradiotherapy, MRI showed a 80% reduction in the size of the tumor.

## DISCUSSION

As reported by epidemiological studies, the most common histological subtypes in women are urothelial carcinoma in 45% to 55 %, squamous cell carcinoma in 19 % to 21%, adenocarcinoma in 16 % to 29 % and unknown or undifferentiated carcinoma in 6 %.<sup>[1,2]</sup>

Multimodal treatment therapy consisting of neoadjuvant chemotherapy and/or radiation therapy (RT) followed by surgery, is generally the treatment of choice in advanced urethral carcinoma.<sup>[3,4]</sup> Surgical resection consists of anterior pelvic exenteration including anterior vaginectomy.

However, definitive chemoradiotherapy can be utilized for patients who are not candidates for primary surgery or who refuse surgery. In the present case, the patient refused anterior exenteration.

Concomitant chemoradiotherapy in adenocarcinoma of the female urethra has been used by extrapolation from the management of urethral Squamous Cell Carcinoma.<sup>[5]</sup> The results with this approach are illustrated by a series of 18 men (17 with squamous cell carcinoma) who have been treated with chemoradiotherapy. A complete response was obtained in 15 of 18 patients, with a five year overall survival rate of 60 percent.<sup>[3]</sup> However, this histologic subtype maybe more radiosensitive and does not behave as adenocarcinoma.<sup>[6,7]</sup>

## CONCLUSION

Adenocarcinoma of the female urethra is a rare entity and it must be differentiated from other histological subtypes as its prognosis differs significantly from them. In patients with locally advanced disease, management consists of a combined modality approach. However, definitive chemoradiotherapy can be an alternative with promising results.

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