Down the Not so Straight and Narrow: A Rare Case of Primary Urethral Squamous Cell Carcinomas in a Young Patient

Kevin Yinkit Zhuo,^{⊠1,2} Aditya Sharma,^{1,2} Chloe Wilcox,^{1,2} Cameron Parkin,^{1,2} Nicola Jeffery,³ Amanda Chung^{1,2}

¹Department of Urology, Royal North Shore Hospital, Sydney, Australia ²North Shore Urology Research Group, Sydney, Australia ³Department of Urology, Royal Prince Alfred Hospital, Sydney, Australia

Primary urethral squamous cell carcinomas (SCCs) are rare, with a variable clinical presentation, and occur infrequently in patients younger than 45 years of age [1–3]. The surgical management for advanced urethral SCCs remains challenging, given it occurs in less than 1 in 100000 men[1,4]. We describe the diagnosis and management of urethral SCC in a 37-year-old male presenting with urinary retention.

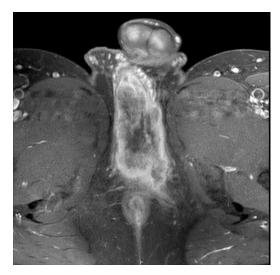
The patient initially presented to our emergency department with fevers, perineal pain on voiding, and

high post-void residuals. His history included recurrent bulbar urethral strictures, UTIs, smoking, and intravenous drug use. His urethral stricture was previously endoscopically managed with dilatation, but the patient had been lost to follow-up.

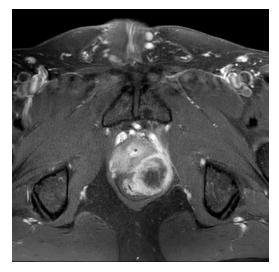
An initial pelvic ultrasound revealed a complex perineal mass inferior to the prostate and contiguous with the urethra. Pelvic MRI subsequently revealed 2 lesions in the perineum (**Figure 1**). FDGPET-scan demonstrated avid lesions in the right inguinal and meso-rectal

FIGURE 1.

Pelvic MRI demonstrating 2 lesions in the perineum



Peri-urethral lesion with corpus spongiosum, left crus corpus cavernosum, and subcutaneous tissue involvement.



Lesion posterior to the prostate with invasion of the left ano-rectal junction.

Key Words

Urethra, carcinoma, squamous cell, urinary retention, urethral stricture, penile neoplasms

Competing Interests

Conflict of Interest: None declared. Patient Consent: Obtained.

Article Information

Received on October 15, 2021 Accepted on October 17, 2021 Soc Int Urol J.2022;3(2):109–110 DOI: 10.48083/BUJM3438

This is an open access article under the terms of a license that permits non-commercial use, provided the original work is properly cited. © 2022 The Authors. Société Internationale d'Urologie Journal, published by the Société Internationale d'Urologie, Canada.

nodes with no distal metastatic disease. Urine cytology suggested malignant cells suspicious for SCC. On pelvic examination, 2 distinct masses were palpable in the bulbar urethra and rectum. Cystoscopy demonstrated an obliterated urethra that could not be cannulated with a wire, thus a suprapubic catheter was placed.

Because of the severity of local symptoms, the patient was discussed in a multi-disciplinary team meeting and transferred to a specialist centre for pelvic exenteration. Before adjuvant chemo-radiotherapy was begun, the

References

- Hakenberg OW, Compérat E, Minhas S, Necchi A, Protzel C, Watkin N, et al. EAU guidelines on penile cancer.2019. Available at: http:// uroweb.org/guideline/penile-cancer/. Accessed January 11, 2022.
- Antwerpen I, Gstrein L, Moskovszky L, Gissler HM, Möltgen T, Kwiatkowski M, et al. Primary urethral squamous cell carcinoma: a unique manifestation of a penile tumor. *J Int Med Res.*2019 Feb;47(2):999–1004. Published online 2018 Dec 5. doi: 10.1177/0300060518813506

patient was identified to have significant local disease recurrence and opted instead for palliative treatment.

Primary urethral SCCs are a rare cause for advanced cancer in young men. This case exhibits the need for considering neoplasms as a differential diagnosis for young patients presenting with urinary retention and perineal pain. It also highlights the need for close follow-up of recurrent urethral stricture patients to ensure there are no complications of their disease.

- Castiglione F, Alnajjar HM, Christodoulidou M, Albersen M, Parnham A, Freeman A, et al. Primary squamous cell carcinoma of the male proximal urethra: outcomes from a single centre. *Eur Urol Focus*.2021 Jan;7(1):163-169. doi: 10.1016/j.euf.2019.02.016. Epub 2019 Mar 7.
- Janisch F, Abufaraj M, Fajkovic H, Kimura S, Iwata T, Nyirady P, et al. Current disease management of primary urethral carcinoma. *Eur Urol Focus*.2019 Sep;5(5):722–734. doi: 10.1016/j.euf.2019.07.001. Epub 2019 Jul 13.