

Novel Finding of Lower Genital Tract Arteriovenous Malformation Leading to Massive Urethral Bleed

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A 68-year-old male was referred for management of transfusion-dependent haematuria after traumatic self-removal of indwelling catheter with inflated balloon. Haematuria recurred intermittently around and within catheter lumen and was exacerbated after each trial of void. Cystoscopy revealed urethral bleeding refractory to endoscopic coagulation.

CT-angiogram demonstrated contrast extravasation in the left corpus spongiosum, suggestive of penile arteriovenous malformation (AVM) (Figure 1A). Endovascular embolisation of the AVM with Gelfoam from the left internal pudendal artery (Figure 1B) was performed because of ongoing transfusion-dependent haematuria. Post-procedurally there was immediate resolution of haematuria, and the patient underwent successful trial of void. At a 9-month follow-up, there was no recurrence of haematuria, no priapism or de novo erectile dysfunction, and no palpable penile lumps.

AVMs of the lower male genital tract are rare, with only a few case reports published[1]. Whilst the majority are paediatric cases of the scrotum and glans penis[2] they can also be acquired from traumatic catheter manipulation[3]. Endoscopic intervention is often the first-line therapy, but it is rarely successful, and an endovascular or open approach is usually required[1]. The endovascular approach carries a risk of erectile dysfunction if the internal pudendal artery is compromised; however, favourable outcomes were identified in a small series of 10 patients[4]. In contrast, open approaches have been favoured in those with atraumatic aetiologies for their AVMs[2]. In this case, a minimally invasive approach has had a favourable outcome in a rare pathology with no standard treatment guidelines.

References

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Key Words

Arteriovenous malformation, urethrorrhagia, catheter injury, haematuria, penile AVM

Competing Interests

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FIGURE 1A.

CT mesenteric angiogram: coronal view in arterial phase demonstrating contrast leak into corpus spongiosum on the left-hand side

FIGURE 1B.

Coronal view from pre-embolisation angiography highlighting region of hypervascularity at base of the penis on the left side from the left internal pudendal artery

