

available at www.sciencedirect.comjournal homepage: www.eu-openscience.europeanurology.com

European Association of Urology



Letter to the Editor

Re: Manuel Armas-Phan, Benjamin N. Schmeusser, Nicholas W. Eyrich, Kenneth Ogan. Double-J Stent Misplacement in the Inferior Vena Cava and Right Atrium: A Urovascular Nightmare. Eur Urol Open Sci 2022;46:128–34

We read the article by Armas-Phan et al [1] with huge interest. The authors need to be complimented for presenting a rare complication of ureteric reimplantation involving erroneous reimplantation of the gonadal vein instead of the ureter into the bladder.

Although this complication was very well managed, one question needs reasoning and discussion. Why was coil embolization of the gonadal vein needed? We feel that this step was not needed for the following reasons.

1. This patient had undergone a total abdominal hysterectomy 4 mo earlier. The gonadal vein would have undergone thrombosis in this period [2]. Posthysterectomy gonadal vein thrombosis is seen in more than 80% cases on computed tomography scans.
2. After misdeployment of the stent and after its removal there was no active bleeding from the stent or from the Foley catheter, confirming that the vein had probably thrombosed.
3. It has been shown that bleeding into the urinary tract from venous communications is unlikely given the lower pressure within the venous system [3,4].

Our group has managed and reported a similar case [5] in which the gonadal vein was anastomosed to a Boari flap and a stent was placed in the inferior vena cava via the Boari flap. There was no significant hematuria perioperatively or on stent removal. The patient has been on follow-up for more than 4 yr after cystoscopic stent removal and has been doing well, with no intervening episodes of bleeding.

There is ample literature suggesting that if any part of a stent that has undergone partial intravascular migration can be reached endourologically, via cystoscopy [4,5], ureteroscopy, or nephroscopy [3], it should be removed endourologically as there is no risk of severe bleeding or fis-

tula. The pressure gradient between the urinary system and the inferior vena cava would block venous flow into the urinary system, especially as the false passage is usually very small (about 6 Fr or 2 mm) in diameter [3]. Furthermore, when an endourological approach is used, it is easy to observe any persistent bleeding as the stent is removed.

We feel in this situation, endovascular intervention may not be necessary and the potential complications of an angiographic intervention can be avoided.

Conflicts of interest: The authors have nothing to disclose.

References

- [1] Armas-Phan M, Schmeusser BN, Eyrich NW, Ogan K. Double-J stent misplacement in the inferior vena cava and right atrium: a urovascular nightmare. *Eur Urol Open Sci* 2022;46:128–34. <https://doi.org/10.1016/j.euros.2022.10.016>.
- [2] Yassa NA, Ryst E. Ovarian vein thrombosis: a common incidental finding in patients who have undergone total abdominal hysterectomy and bilateral salpingo-oophorectomy with retroperitoneal lymph node dissection. *Am J Roentgenol* 1999;172:45–7.
- [3] Tang Z, Li D, Xiao L, et al. Re: Intracaval migration: an uncommon complication of ureteral double-J stent placement. (From: Falahatkar S, Hemmati H, Gholamjani Moghaddam K. *J Endourol* 2012;26:119–121). *J Endourol* 2012;26:1100–1. <https://doi.org/10.1089/end.2012.0038>.
- [4] Özveren B, Re ŞA. Intracaval migration: an uncommon complication of ureteral double-J stent placement. (From: Falahatkar S, Hemmati H, Gholamjani Moghaddam K. *J Endourol* 2012;26:119–121). *J Endourol* 2013;27:1069–71. <https://doi.org/10.1089/end.2012.0656>.
- [5] Maheshwari PN, Oswal AT, Wagaskar VG. A double J stent misplaced in the inferior vena cava during Boari flap repair. *Indian J Urol* 2016;32:71–3. <https://doi.org/10.4103/0970-1591.173113>.

Pankaj N. Maheshwari*
Aditya Goyal
Pushkar Srivastava

Department of Urology, Fortis Hospital Mulund, Mumbai, India

*Corresponding author. Department of Urology, Fortis Hospital Mulund, Mulund West, Mumbai 400080, India. Tel. +91 88 7935 0085. E-mail address: dr.maheshwaripn@gmail.com (P.N. Maheshwari).

January 10, 2023

DOI of original article: <https://doi.org/10.1016/j.euros.2023.01.014>

<https://doi.org/10.1016/j.euros.2023.01.015>

0302-2838/© 2023 The Author(s). Published by Elsevier B.V. on behalf of European Association of Urology. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

