

Correspondence

## Was acute renal failure induced by ureter catheters?

*To the Editors:*

We read Hong and colleagues' report, entitled "Complete bilateral ureteral obstruction following retrograde catheterization and radical hysterectomy", with interest [1]. The authors described a very interesting case—acute renal failure that occurred in a 39-year-old woman with squamous cell carcinoma of the cervix, who was treated with radical hysterectomy. Before performing the radical hysterectomy, 5-Fr side-hole ureter catheters were inserted. During the operation, severe adhesion was noted, and hematuria was found during the isolation of the ureters and unroofing of the tunnels.

There is no doubt that the risk of complication was high in this patient, including the relatively advanced stage—stage IIa, the difficulty of the operation—severe pelvic adhesion, and obesity [1]; therefore, any strategy to prevent the possibility of complication or postoperative sequelae, especially during and after radical hysterectomy, is welcome [2–4]. Unfortunately, the complication still occurred. The authors also claimed that the anuric complication post retrograde ureteral catheterization was largely attributable to an edematous change in the ureteral orifice [1].

This case report has great educational value, including that the authors used the 5-Fr side-hole catheters to assist in identification and management of the ureters during the difficult pelvic surgery; prescribed tranexamic acid to control hemorrhage, which has been supported by the literature and clinical trials [5]; and used nonsteroidal anti-inflammatory drugs to control postoperative pain [6]. Unfortunately, the above-mentioned treatment, which was originally designed to be of benefit to this patient, was finally believed to have contributed to this complication—acute renal failure. Although the authors tried to explain the causes of this clinical condition, we are still uncertain why this patient was complicated by acute renal failure. We hope to see further discussion. Of course, we should emphasize that this should not be construed as an argument against the authors' excellent work.

First, was there any hematoma formation at the pelvic cavity after operation? Second, did the authors find any urine leakage from the ureters after operation? The authors reported that they found external compression near the right ureter orifice and, further, an emergent abdominal

computed tomography without contrast revealed only mild bilateral hydronephrosis [1]. If the hematuria occurred simultaneously with the radical hysterectomy, it is rational to suppose that the trauma of the bilateral ureters occurred at this time, which might have resulted in their occlusion. Furthermore, a recent report has shown the correlation between elevated blood creatinine and urinary tract system injury [7]. Since there were no figures of the ureteroscopy and the computed tomography available in their report [1], the causes of acute renal failure in their reported patient are still unclarified.

Third, were the 5-Fr side-hole ureter catheters removed immediately after radical hysterectomy? Fourth, in what direction were the double J stents inserted, retrograde or antegrade?.

### References

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