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LETTER TO THE EDITOR

The double wire technique: an alternative method for difficult ureteroscopic access

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Abstract We read with great interest the study report by Ji et al. (Urol Res, doi:10.1007/s00240-012-0476-0, 2012) about the impact of the intentional ureteral stenting on the success rate of calculus extraction by second ureteroscopy, when the initial ureteroscopy failed. Actually, sometimes ureteral stone treatment pose challenging problems for the urologists. This study has filled an important gap on this field. If flexible ureteroscopy and laser lithotripter are not available pre-existing stent may improve the success rate of a subsequent ureteroscopy for impacted ureteral stones. Because, post-stent ureteroscopy has the advantage of working through a dilated ureter. We would like to add some additional comments and suggestions in addition to the authors' discussion, which is noteworthy in several respects.

In 1.6–2.7 % of cases [2, 3], a ureteroscope finds it hard to pass the meatus, to run through the intramural ureter, or to reach the lesion. A reduction in size and improvements in the shape of instruments have rendered such occurrences somewhat rare, however not totally obsolete. When the ureteral orifice is too narrow to accommodate a ureteroscope, dilation may be accomplished with serial dilators, balloons, or even the ureteroscope itself with the risk of trauma and the potential for long-term stricture formation.

This single center prospective study demonstrate that indwelling a ureteral stent leads to a high subsequent success rate for second ureteroscopy following an initial failed procedure. Nonetheless, economic effects and morbidity of stent placement have not been assessed in this study. Actually, ureteral stents are commonly associated with significant discomfort and have been shown to alter quality of life (QoL). The urinary symptoms and pain associated with indwelling ureteral stents interfere with daily activities and result in reduced QoL in up to 80 % of patients. In addition, stents are associated with negative function capacity and reduced utility values [4–7]. Stent and the presence of stone in the distal ureter appeared to be among the most significant factors that influence patients' QoL [8].

On the other hand increased number of interventions usually require recurrent anesthetic procedures which might increase the rates of morbidity, and prolong hospital stay and bringing additional treatment costs for the treatment of this type of patients.

In our surgical practice, a main element of the therapeutic strategy is to decrease the number of interventions which has a negative impact on the QoL of the patients. For this purpose, we prefer double wire technique as an alternative method, for these difficult cases. In this technique, firstly a safety guidewire under fluoroscopic guidance is placed into the ureter through a cystoscope. For the next step, another guidewire is introduced into the ureteral orifice through ureteroscope's working channel that allows retrograde ureteral access with relative ease. After that a gentle attempt is made for ureteroscopic access between these two guidewires (Fig. 1). This maneuver might allow the ureter to dilate and allow for an easier upper tract access especially in a patient having a particular anatomic variation like dislocation of the ureteral orifices by prostatic hyperplasia, distal edema caused by an impacted stone or a prolonged muscular spasm. A correct approach to this situation would be to avoid any strong pressure. We believe that this technique leads to successful and safe management for the treatment of ureteral stone disease in difficult access

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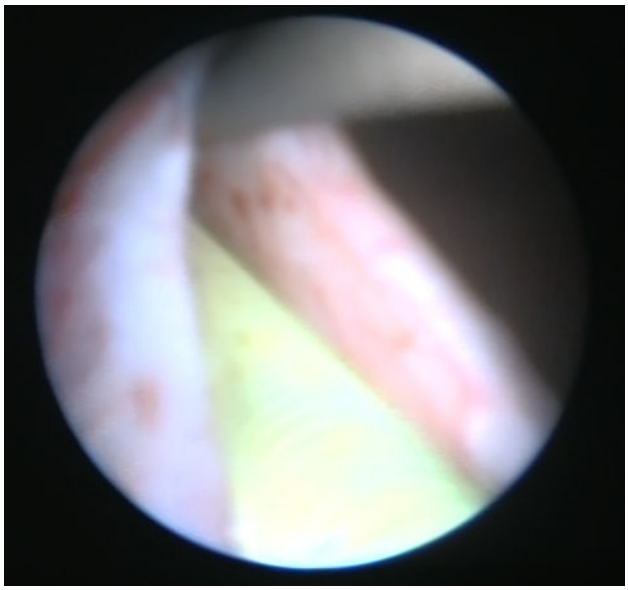

Fig. 1 Ureteroscopic access with double wire technique

cases and should be kept in mind as an important alternative method to avoid side effects associated with indwelling ureteral stents [9] and their impact on patient QoL.

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