watching the development of this procedure by other motivated forward-thinking clinician scientists.

Acknowledgment. To Desert Mountain CARE for their support of prostate cancer research and this project.

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Re: Xu Y: Doppler Ultrasound-guided Percutaneous Nephrolithotomy With Two-step Tract Dilation for Management of Complex Renal Stones (Urology February 24, 2012 [Epub ahead of print])

TO THE EDITOR:

We read the report by Xu et al[1] with great interest. The authors present the results of 262 patients with complex renal stones treated with Doppler ultrasound (US)-guided percutaneous nephrolithotomy with 2-step tract dilation. They achieved a comparable primary stone-free rate (80.9%) and overall complication rate (4.96%). Finally, they concluded that Doppler US-guided percutaneous nephrolithotomy with 2-step tract dilation for complex renal stones is safe, effective, and worthy of wider use in clinical practice. It is obvious that the use of US or Doppler US as an imaging method during percutaneous nephrolithotomy has some advantages and these have been published in previous studies.[2-4] However, some points of the study about the technique need to be addressed and clarified.

The ureteral catheter placed by way of a cystoscope is used to inject the saline, contrast medium, or air to fill the collecting system and facilitate percutaneous renal access. Although the ureteral occlusion balloon catheters are used to prevent the passage of fluid or stone fragments, the ureteral catheter does not prevent the down migration of stone fragments.[5]

The other factor that needs to be clarified is the dilation technique. In the first step, the tract was dilated with fascial dilators from 8F to 16F, and the safety of the access and collecting system was controlled with an 8F/9.8F ureteroscope. In the second step, dilation was performed ≤24F with telescopic metal dilators. The authors advocate that this technique minimizes the risk of access failure and avoids complications, such as renal pelvis perforation, extravasation, and hemorrhage. We believe that second-step dilation has the same risk of complications mentioned. Furthermore, these complications should be minimized with the use of imaging methods, such as fluoroscopy or US. In addition, no information is provided on whether the authors used US during the dilation or not.

The other point is that the rate of patients with partial and complete staghorn stones is reported as 71.75% (83 patients with complete and 105 patients with partial staghorn stones).

The endoscopic treatment of staghorn stones is challenging and is associated with prolonged operation and hospitalization times, an increased complication rate, and a decreased success rate compared with these for non-staghorn stones. I applaud the authors that they report a very low complication rate and short operation time (56 minutes). Although they attributed the short operation time to the use of the combined ultrasonic and pneumatic lithotripter, it is well known that small-size nephroscopes prolong the operation time.[6]

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indwelling ureteral catheter, ureteral occlusion balloon, and ureteral access sheath. *Urology*. 2002;60:584-587.
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Reply by the Authors

TO THE EDITOR:

Thank you for your important comments. Endourologists have used a ureteral catheter to discourage the passage of stone fragments into the ureter during percutaneous nephrolithotomy, although this has remained suboptimal. Therefore, a ureteral occlusion balloon has been used to prevent fragment migration. However, its cost and the difficulty in inserting a safety guidewire down the ureter after inflation have limited its application.[1]

In our series, both access to the collecting system and tract dilation were performed under ultrasound guidance. Once access to the collecting system was confirmed by an 8F/9.8F rigid ureteroscope, the central hollow guide rod and the 3 telescopic metal dilators of 9F, 12F, 15F were placed together into the kidney through the 16F peel-away sheath before it was withdrawn, which could make the next serial dilation relatively easier. These have been described in the Comment section of our article.

For standard percutaneous nephrolithotomy, a 28-30F working sheath is used with a regular 24-26F nephroscope. However, the use of smaller working sheaths has been made possible with the advent of miniature nephroscopes. In fact, the use of a large working sheath with a smaller nephroscope leads to large outflow of irrigating fluid, which can result in reduced visibility. Lezrek et al[2] also routinely use a 24F working sheath and a 20.8F nephroscope during percutaneous nephrolithotomy. Although the replacement of the working sheath with a 30F sheath might allow more rapid extraction of larger stone fragments with forceps, they need a left hand to hold the nephroscope and working sheath, blocking the sheath entrance with thumb and index finger round the nephroscope shaft, to overcome the large outflow of irrigating fluid.

Although significant fragments can be extracted by forceps, we prefer using an ultrasonic lithotripter to further fragment the stone pieces created by the pneumatic lithotripter and to suck the stone particles through the hollow probe. It can fragment and aspirate fragments simultaneously with little down time for instrument changes, potentially reducing the operative time.[3]

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Re: Bozkurt et al.: Relationship Between Mean Platelet Volume and Varicocele: A Preliminary Study (Urology 2012:79: 1048-1051)

TO THE EDITOR:

I read the article by Bozkurt et al with a great interest.[1] They have shown that patients with varicocele had significantly higher mean platelet volume (MPV), and that the increase in varicocele grade was associated with higher MPV in varicocele patients. This is very interesting study. It has been reported that patients with coronary artery ectasia (CAE) have an increased prevalence of varicocele, suggesting a possible common pathologic mechanism.[2] In relation to this, we have shown that MPV was significantly elevated in patients with CAE in our previous study.[3] The same pathophysiological mechanism might increase MPV in these two group diseases.

By contrast, we want to make a minor criticism of this study. In the methods section, the authors did not mention the tube that the blood sample was collected for whole blood count. This is very important. MPV increases over time in ethylenediaminetetraacetic acid (EDTA)–anticoagulated samples, and this increase was shown to be proportional to the delay in time between sample collection and laboratory analysis. With impedance counting, the MPV increases over time as platelets swell in EDTA, with increases of 7.9% within 30 minutes having been reported and an overall increase of 13.4% over 24 hours, although most of this increase occurs within the first 6 hours.[4] The recommended and optimal measuring time of MPV is 120 minutes after venipuncture.[5] For reliable MPV measurement, the potential influence of anticoagulant on the MPV must be carefully controlled, either by using an alternative anticoagulant (such as citrate) or by standardizing the time delay between sampling and analysis (less than 2 hours). This situation is not clear in the study report.

Second, as the authors mentioned in the text, there are significant associations of MPV with type 2 diabetes mellitus, prediabetes, smoking, hypertension, hypercholesterolemia, obesity, coronary heart disease, metabolic syndrome, statin use, and atrial fibrillation.[6] The authors did not mention these factors in regard to the patients and control subjects in their study. The factors must have