

## COMMENTARY

## Twin Amplatz Sheath Method: A Modified Technique of Percutaneous Cystolithotripsy for Large Bladder Stone in Females

Unfortunately, bladder lithiasis remains a clinical problem in both developing and developed countries, as in the former many children suffer from endemic primary bladder lithiasis and in the latter the overall proportion is 5% of all urinary stones.<sup>[1]</sup> Studies have demonstrated that relieving bladder outlet obstruction in male patients, eliminating infection, and removing foreign bodies are paramount in treating bladder lithiasis. Also, it has been shown that bladder stone characteristics, physical status of the patient, operative costs, and available instrumentation should be taken into account before performing definite treatment.<sup>[1]</sup> Nowadays, transurethral cystolitholapaxy with the lithoclast that combines both ultrasound and pneumatic properties seems a reasonable and effective minimal invasive procedure in comparison with open cystolithotomy. Similarly, percutaneous cystolithotripsy has been proposed and studied by several endourologists as an alternative to open surgery.<sup>[2]</sup>

Kumar *et al.*,<sup>[3]</sup> presented an interesting endoscopic technique that facilitates percutaneous cystolithotripsy for large bladder stones in females. The authors sequentially dilated the urethra with facial dilators and inserted a 28 Fr amplatz sheath into the bladder. It is obvious that this technique is limited only in females as a relevant dilatation of the male urethra is not possible. Furthermore,

as dilatation of the female urethra has long been practiced in postmenopausal urethral stenosis, the author's technique should ideally not include younger women. A drawback of the study is the small number of the patients (only three); therefore, the results of the technique in more patients are warranted. Ideally, a comparative study between patients undergoing this technique and patients that undergo the standard percutaneous cystolithotripsy could demonstrate the pros and cons of each procedure. Nevertheless, in their case series, the authors demonstrated that the twin amplatz technique was a safe and effective technique for performing percutaneous cystolithotripsy in females expeditiously. The clear endoscopic vision and self-extrusion of stone fragments through the urethral amplatz were potential benefits.

Extracorporeal shock wave lithotripsy (ESWL) has been considered an acceptable treatment of choice for the management of bladder stone as it is easy, simple, well-tolerated (especially in high-risk patients), and effective provided that the stone is not too large and that the patient can pass the stone fragments. Currently, I conduct a clinical study at my department in order to assess the best minimal invasive treatment of large bladder stones. Standard transurethral cystolitholapaxy and percutaneous cystolithotripsy are compared with my personal modification of adding a session of ESWL on the day of the surgery. The concept of performing ESWL a few hours prior to the operation is based on the idea of managing a possible urinary retention as well as on the effort not to increase the hospitalization time. This procedure could fragment a large bladder prior to the operation, limit the operative time, and enable more cases to be treated transurethrally than

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with the percutaneous approach, which is more invasive. According to the preliminary results, the addition of preoperative ESWL on the day of the operation is very effective especially in female patients; however, it is less cost-effective in comparison with the standard transurethral cystolitholapaxy (unpublished data).

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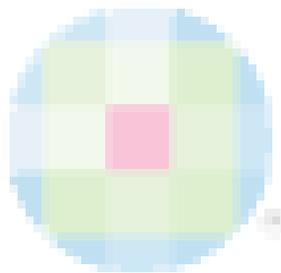
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**REFERENCES**

1. Papatsoris AG, Varkarakis I, Dellis A, Deliveliotis C. Bladder lithiasis: From open surgery to lithotripsy. *Urol Res* 2006;34:163-7.
2. Philippou P, Moraitis K, Masood J, Junaid I, Buchholz N. The management of bladder lithiasis in the modern era of endourology. *Urology* 2012;79:980-6.
3. Kumar A, Dalela D, Dalela D, Goel A, Paul S, Sankhwar SN. Twin Amplatz sheath method: A modified technique of Percutaneous Cystolithotripsy for large bladder stone in females. *J Surg Tech Case Rep* 2013;5:109-11.

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