

Efficacy of Acupuncture Treatment for Urolithiasis: A Case Report

¹Department of Acupuncture and Energy Medicine, Government Yoga and Naturopathy Medical College and Hospital, Chennai, India

²Department of Diagnostic Methods, Government Yoga and Naturopathy Medical College and Hospital, Chennai, India

Urolithiasis is characterised by the development of stones in the renal pelvis, ureter, bladder, or urethra. Giant ureteral calculi are ones with a circumference or length of more than 5 cm. If not treated in a timely manner, these massive calculi might result in ureter obstruction, renal dilatation, and impaired kidney function. The male patient in this report presented with complaints of unilateral episodic pain of the right lumbar region. During a Tran's abdominal ultrasound of the entire abdomen and pelvis, a big right ureteral stone measuring 11.3 * 6.6 mm in length was discovered. After that, acupuncture was used to treat the ureteric calculus successfully.

Keywords: Urolithiasis; Acupuncture; Giant ureteral calculi

Introduction

Stones in the renal pelvis, ureter, bladder, or urethra are the hallmark of the common urinary disease urolithiasis [1]. Recent epidemiological data show that nearly all nations now have significantly higher prevalence and incidence rates of urolithiasis [2]. A potential emergency condition called urolithiasis frequently causes severe abdomen, low back, flank, or groin pain. Ureteral stones are a common complaint in primary care centres. Most patients describe the pain as a downward-radiating flank pain that progresses anteriorly into the abdomen, pelvis and genitals as the calculus travels from the kidneys down the ureter and into the bladder [3].

The likelihood of spontaneous passage of the ureteral stones is associated with both location (proximal, mid, and distal ureter) and size of the stone [4]. Usually small, ureteric calculi have the potential to gradually enlarge in size. Nephrolithiasis and, in some circumstances, renal system blockage might develop as a result, leading to kidney failure. The following case describes a patient in which Urolithiasis resulted in occlusion of the renal system and nephrolithiasis [5].

Renal enlargement and reduced kidney function can also result from ureter obstruction [6]. Ureteric stones larger than 5 cm in length, circumference, or weight are referred to as giant ureteric calculi [7].

Based on the prior studies, the spontaneous passage rate as a function of stone size was 25% for stones larger than 9 mm. Additionally, stones in the distal and ureterovesical junction were more likely to spontaneously pass than stones in the proximal or mid-ureter [8]. In this study, we report a case of unilateral urolithiasis associated with right hydronephrosis due to pelvi-ureteric junction calculus obstruction with size of 11.3*6.6 mm (7.45 cm) along with peri-nephritic fat strands.

Case Report

A 40-year-old male patient presented to the out-patient department of Government Yoga and Naturopathy Medical College and Hospital, Arumbakkam on November 11, 2021 with severe right flank pain radiating to right lower quadrant. His blood pressure was 120/70 mmHg, pulse rate was 76 bpm and temperature was 36.7°C. The pain was insidious in onset. His medical history included a similar pain in the right flank one month earlier which was diagnosed as large kidney stone. The history of his illness indicated that the patient did not use any medication to reduce his pain. No significant medical or family history was mentioned. His breathing and pulse rate were both within normal ranges. He had no symptoms of edoema, nausea, abdominal pain, or

indigestion. He had a soft, evenly distributed abdomen that was more so in the lower right quadrant. The patient was not currently taking any drugs and had no known chronic medical issues. He presented the transabdominal ultrasonography (USG) of whole abdomen and pelvis report while in OP consultation. The USG findings illustrated a huge calculus with a size of 11.3*6.6 mm (7.45 cm) length in pelvi-ureteric junction of right kidney (Table 1).

Although his right kidney's excretion was somewhat reduced, his total renal function was normal, and his left kidney's excretion was found to be acceptable. Since he had an intense fear of needles and surgery, he opted for Acupuncture treatment. After gaining informed consent, the patient underwent 15 sessions of Acupuncture treatment with points such as CV 3, 6; ST 28; SP 6, 9, 15; K 8; GB 25; and UB 23, 28 along with few dietary modifications as increased water intake (approximately), and plantain pith juice (200 ml, once daily in empty stomach). Sterile disposable acupuncture needles (length, 40 mm; diameter, 0.3 mm) were inserted at an angle of 90° and a depth of 0.5 cm (about 8-10 mm). Twirling, lifting, and thrusting (needle manipulation) were performed for at least 30 seconds per acupuncture point to reach De qi sensation (soreness, numbness, distention, and heaviness). These acupuncture points were developed from experience with clinical experts. The patient attended all the 15 sessions and a trans-abdominal ultrasonography was taken after a month as post assessment shows that

Impression in transabdominal ultrasonography (USG) before and after Acupuncture treatment.

Right hydronephrosis due to pelviureteric junction calculus measuring 11.3*6.6 mm obstruction. Right acute pyelonephritis	Right renal microliths in upper pole No evidence of pelvicalyceal dilatation Cortico medullary differentiation within normal limits
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