



Letters to the Editor

Milk of calcium in the inferior calyx of a hydronephrotic kidney in a tetraplegic patient

S Vaidyanathan *et al.* *Spinal Cord* 2000; **38**: 325–326.

We read with interest the case report and discussion by Vaidyanathan S *et al*¹ on 'Milk of calcium in the inferior calyx of a hydronephrotic kidney in a tetraplegic patient – a diagnosis to be made before scheduling for extracorporeal shock wave lithotripsy'. We would like to add to their experience by adding a case of ours who recently presented to our department for treatment with ESWL. The patient was a 49 year old male who underwent a plain radiograph of the abdomen during general work up for the investigation of abdominal pain. This revealed a 1.5 cm irregular calcification within the interpolar region of the right kidney. The calcification was confirmed to be intrarenal by the employment of tomograms through the right kidney. The patient was referred for targeted lithotripsy (ESWL) on the presumed renal calculus. After three sessions of therapy, the calcification had remained unchanged. At this stage an intra venous pyelogram was arranged. This demonstrated that the calcification lay within the parenchyma of the kidney. In addition to this there was focal scarring at the site of calcification. The findings were suggestive of old tuberculosis. On further questioning the patient, he gave a remote history of pulmonary and right hip tuberculosis. The calcification of the kidney was therefore dystrophic in origin and not a true calculus. Clearly such calcification would not respond to ESWL. Our case adds further credence to the case report by Vaidyanathan S *et al*, that not all densities or calcifications within the kidneys on imaging are calculi. Referring such patients for ESWL is therefore fruitless. Such entities should always be considered in patients being referred for ESWL.

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Reference

- 1 Vaidyanathan S *et al.* Milk of calcium in the inferior calyx of a hydronephrotic kidney in a tetraplegic patient – a diagnosis to be made before scheduling for extracorporeal shock wave lithotripsy. *Spinal Cord* 2000; **38**: 325–326

In reply to Dr Torreggiani and Dr I Lyburn

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S Vaidyanathan *et al.* *Spinal Cord* 2000; **38**: 325–326.

We thank you very much for the opportunity provided to respond to the letter by Dr Torreggiani and Dr I Lyburn.

It is interesting to note that others also have experienced difficulty in making a precise diagnosis of a radiopaque shadow projected over the kidneys on an abdominal X-ray. It is imperative that before scheduling a spinal cord injury (SCI) patient for extracorporeal shock wave lithotripsy, additional imaging studies are performed. These investigations will reveal whether a radiopacity seen in an abdominal X-ray in a SCI patient represents a calculus in the pelvicalyceal system suitable for lithotripsy.

Unenhanced computerised axial tomography (CT) of the kidneys was found to be superior to plain renal tomography to detect renal calculus and to find out the precise location of the calcified shadow within the kidney.¹ Further CT helps to diagnose renal milk of calcium in SCI patients in whom it is difficult or impossible to take an upright film of the abdomen. The imaging studies should be carried out expeditiously in SCI patients in order to avoid complications due to delay in diagnosis of upper urinary tract calculus.²

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Reference

- 1 Waldmann TB, Lashley DB, Fughes EF. Unenhanced computerized axial tomography to detect retained calculi after percutaneous ultrasonic lithotripsy. *Journal of Urology* 1999; **162**: 312–314.
- 2 Vaidyanathan S *et al.* Silent hydronephrosis/pyonephrosis due to upper urinary tract calculi in spinal cord injury patients. *Spinal Cord* (in press).