A 40-year-old man presented with right-sided flank pain of sudden onset and intermittent macroscopic haematuria that had been present for the past 3 months. He had had a hospital admission for a right ureteric stone 3 years previously, where some ‘intervention’ had been performed. He had been told to return for a follow-up visit, but had defaulted as he felt well after being discharged.

The patient was clearly distressed, with right-sided renal angle tenderness and severe suprapubic pain. A plain supine abdominal film (Fig. 1) and non-contrast computed tomography (CT) scan (Fig. 2) revealed an encrusted ‘forgotten’ JJ stent with a significant associated secondary stone burden.

A renogram confirmed that the right kidney had been severely affected by the subsequent stone burden, now contributing only 10.32% of the overall renal function.

Discussion

Ureteral JJ stents are invaluable in endo-urological practice, as they provide free drainage from the kidney to the bladder and are effective in relieving and preventing upper urinary tract obstruction.\(^1\) However, complications occur in up to one-third of patients,\(^2,3\) which most commonly include stent encrusation, stent migration, stent fracture and secondary stone formation.\(^1\) Other complications include dysuria, frequency, vesico-ureteric reflux and ureteral fistula.\(^3\) For stents that have lost their radio-opaque coating or when radiography is contraindicated, ultrasonography is the diagnostic modality of choice.\(^1\)

Treatment usually involves endoscopic removal of the retained stent. For stents with a high stone burden, the use of a combination of percutaneous nephrolithotripsy, extracorporeal shockwave lithotripsy, ureteroscopy, electrohydraulic lithotripsy, laser lithotripsy and percutaneous chemolysis may be necessary, with clearance rates of up to 100% being achieved.\(^4\)

Careful selection of patients who stand to benefit most from JJ stent insertion is essential to prevent unnecessary complications.\(^1\) Some patients may disregard counselling concerning the stent’s impermanent nature, the need for a return visit for its timely removal and subsequent intervention.

This is particularly relevant in settings with poor patient compliance, inadequate record keeping, language barriers, ineffective follow-up strategies and limited access to...
specialised health care. The presence of a ‘forgotten’ JJ stent in patients presenting with flank pain and haematuria should be considered, as it may have devastating consequences if left undetected.

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Fig. 2. Abdominal CT scan (3D reconstruction) illustrating the stone burden along the JJ stent. Fracture of the distal stent can also be seen.