An Enostosis may be Misdiagnosed as a Ureteral Stone

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Key words: enostosis, bone island, ureteral stone, computed tomography

(Intern Med 52: 1441, 2013)
(DOI: 10.2169/internalmedicine.52.0401)

A 55-year-old man was referred to our department for incidental left hydronephrosis diagnosed on ultrasonography. A kidney, ureter, and bladder radiograph showed four calcifications in the left urinary tract: one in the middle ureter (U2) and three in the lower ureter (U3) (Picture 1). A non-contrast-enhanced computed tomography (NCCT) scan revealed that the calcification in U2 was a bone island in the left ilium (Picture 2). For the remaining three calcifications (the stones in U3), transurethral lithotripsy with rigid ureteroscopy and laser was performed, and all stones were completely crushed.

The differential diagnosis for calcifications in the pelvic space includes an enostosis, also known as a bone island, which represents a focus of mature compact bone within the cancellous bone (1). When an enostosis overlaps the urinary tract and its size is compatible with a ureteral stone, such as in this case, performing NCCT is mandatory to obtain an accurate diagnosis.

The authors state that they have no Conflict of Interest (COI).

Reference