Imaging findings of urinary tuberculosis on excretory urography and computed tomography

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摘要

Abstract

PURPOSE: We performed a retrospective study to analyze findings on excretory urography (IVP) and computerized tomography (CT) in patients with urinary tuberculosis. MATERIALS AND METHODS: In a 16-year period 53 patients with a total of 47 IVP and 33CT examinations were diagnosed with urinary tuberculosis at our hospital. IVP and CT were reviewed and compared for certain imaging findings, including moth-eaten calices, renal parenchymal masses, an amputated infundibulum, autonephrectomy, thick urinary tract walls, urinary tract calcifications, renal parenchymal cavities, hydrocalycosis, hydronephrosis or hydroureter due to stricture, extra-urinary tubercular manifestations and renal parenchymal scarring. RESULTS: The most common finding on IVP was hydrocalycosis, hydronephrosis or hydroureter due to stricture, whereas renal parenchymal scarring was the most common finding on CT. Imaging findings of renal parenchymal masses and scarring, thick urinary tract walls and extra-urinary tubercular manifestations were significantly more common on CT than on IVP. Three imaging patterns were noted on all 44 IVPs (100%) and 31 of 33 CTs (94%) with multiple imaging findings, including multiple stricture sites, a single stricture with 1 other imaging finding and autonephrectomy with another imaging finding other than stricture. CONCLUSIONS: When the 3 imaging patterns are shown on IVP and CT, tubercular cultures or biopsies are suggested to make the definite diagnosis of urinary tuberculosis. Thus, treatment can be initiated as early as possible.