

BCG Renal Granuloma



Jeffrey Marks, Michael Argyres, and Granville Lloyd

A 66-year-old man with a history of recurrent urothelial carcinoma in situ treated with endoscopic resection and induction Bacillus Calmette-Guerin (BCG) developed a new renal mass on surveillance computerized tomography and was referred to our institution for surgery. Biopsy was performed and pathology showed BCG granuloma. The patient was clinically asymptomatic. No surgical intervention was required. This is a rare entity in those undergoing intravesical BCG therapy. To avoid unnecessary surgery, a careful patient history and judicious use of renal mass biopsy is critical. UROLOGY 127: e10, 2019. © 2019 Elsevier Inc.

A 66-year-old male was referred from an outside hospital for surgical treatment of a renal mass found while undergoing surveillance imaging for recurrent urothelial carcinoma in situ. Prior therapy had included 1 induction course of intravesical Bacillus Calmette-Guerin (BCG). Previous transurethral resections occurred over the left ureteral orifice; however, a VCUG was not performed. Imaging 21 months prior showed no mass. Computerized tomography showed a 2.2 × 2.2 × 2.7 cm solid, enhancing left renal mass (see Fig. 1). Renal mass biopsy was performed and pathology was consistent with acute and chronic granulomatous interstitial nephritis without evidence for malignancy, presumably consequent to BCG therapy (see Fig. 2). No surgical or medical intervention was performed.

BCG renal granulomas occur in approximately 0.1% of individuals undergoing intravesical BCG instillation.¹ It is difficult to distinguish these masses from malignant entities although a central unaffected calyx has previously been described.² Our patient was clinically asymptomatic, but there have been reports of

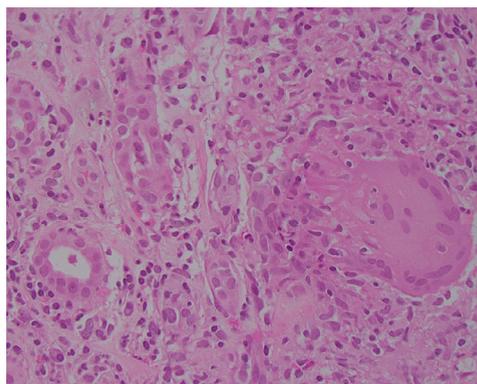


Figure 2. H&E stain.

these masses causing systemic infection.^{3,4} This rare clinical entity should be included in the differential diagnosis in all patients presenting with a renal mass with a history of intravesical BCG treatment. Renal mass biopsy may play a key role when treatment is contemplated.

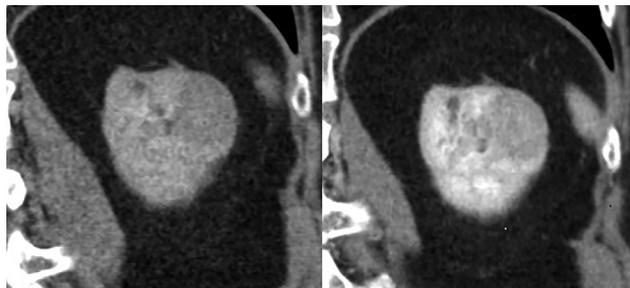


Figure 1. Coronal CT with & without contrast.

References

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From the University of Colorado School of Medicine Division of Urology, Aurora, CO; and the Denver Veterans Affairs Medical Center, Aurora, CO

Address correspondence to: Jeffrey Marks, M.D., University of Colorado School of Medicine Division of Urology, 1576 Glencoe St., Denver, CO 80220. E-mail: Jeffrey.Marks@ucdenver.edu

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