Challenges in the diagnosis of xanthogranulomatous cystitis

In this report, the authors present a case of a middle-aged woman with xanthogranulomatous cystitis (XC). The authors describe their diagnostic and therapeutic approach, the patient's short-term outcome and provide a limited discussion this disease.

XC is a rare, benign chronic inflammatory disease of unclear etiology and was first described in 1932 by Wassilijew.[1] The disease does not have specific clinical findings other than lower abdominal pain and cystitis such as symptoms, umbilical discharge, and occasional hematuria. The varied clinical presentation and paucity of definite diagnostic tests make the diagnosis difficult to confirm.[2] Imaging modalities such as computed tomography scanning and magnetic resonance imaging help very little to the identification of this infection pre-operatively.

The irregular and necrotic appearance of XC may imitate carcinoma macroscopically. In reported cases, the etiology
of XC was also proposed as urachal cyst or urachal remnant, or an abnormal host response to a malignancy that leads to chronic xanthogranulomatous inflammation.\(^3\) In the presented case, neither urachal cyst nor urachal remnant was found. Pre-operative diagnosis was difficult to achieve due to the non-specific clinical presentation, while histopathologic findings were misleading indicating urothelial neoplasia of unknown malignant potential.

The curative treatment of choice is surgical resection with no post-operative recurrence ever reported.\(^4\) Additional chronic suppressive antibiotic therapy may be helpful. Most of these patients have a history of recurrent urinary tract infection and urolithiasis. Identifying this subpopulation of patients and aggressively treating the urinary tract infection with appropriate antibiotics obstruction is important. Early diagnosis may limit the disease process and associated morbidity, thus leading to a good outcome. Sampling of the entire surgical specimen during gross examination by pathologists is essential in order to distinguish between XC, urachal adenocarcinoma and XC accompanying carcinoma.

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