Urachal Xanthogranulomatous Inflammation

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We report a rare case of urachal xanthogranulomatous inflammation, which presented as voiding frequency in a 67-year-old female patient. Abdominal computed tomography showed a mass above the bladder extending to the umbilicus. The patient received partial cystectomy with urachal excision, which showed a good outcome without tumor recurrence during 3 months of follow-up. There have only been a few reported cases of urachal xanthogranulomatous inflammation in the literature, of difficulties in the preoperative differential diagnosis from urachal carcinoma.

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1. Introduction

To our knowledge, xanthogranulomatous inflammation is found almost exclusively in the kidney. Here, we report a case of urachal xanthogranulomatous inflammation in a 67-year-old female patient who presented with voiding frequency. The patient received partial cystectomy with urachus excision. The diagnosis was confirmed by histopathology.

2. Case Report

A 67-year-old woman presented with recurrent voiding frequency and dysuria for 2 years without a history of lower abdominal pain or fever. The patient was referred from a local hospital with computed tomography imaging. Physical examination showed no palpable mass and no tenderness in the lower abdomen. Cystoscopy revealed bladder mucosa inflammatory change at the dome (Figure 1). Abdominal computed tomography (Figure 2) showed a 5.67 × 3.89 × 3.37 cm mass above the bladder extending to the umbilicus. The mass was highly suspected to be urachal carcinoma.

Partial cystectomy with urachal excision was performed. Pathology showed chronic inflammatory cells and...
Figure 2  Abdominal computed tomography shows a mass above the bladder extending to the umbilicus: (A) transverse view; (B) sagittal view.

Figure 3  (A) Gross photograph of the urachal tumor; (B) microscopy shows chronic inflammatory cells and multinucleated giant cells (400×).

multinucleated giant cells (Figure 3). The histological diagnosis was urachal xanthogranulomatous inflammation. The patient has remained well without any recurrent symptoms after 3 months of follow-up.

3. Discussion

Xanthogranulomatous disease is well known, and its pathological findings include large clusters of macrophages with lipid-rich cytoplasm. Diagnosis of urachal xanthogranulomatous disease is rare. Most cases present with abdominal mass, pain or fever.2–4

Xanthogranulomatous disease and urachal carcinoma are almost indistinguishable in terms of clinical symptoms and radiological findings.2 Partial cystectomy with urachal resection is the standard surgical procedure for this disease,3 and these patients generally remain in good health without any recurrence.4

References