

# Xanthoma of the urinary bladder – A rare entity

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## ABSTRACT

Xanthomas of the urinary bladder are rare. They may be associated with metabolic disorders. We hereby report a case of bladder xanthoma.

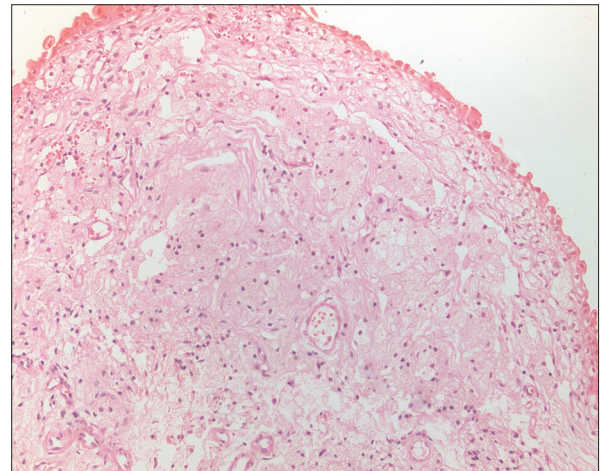
**Key words:** Urinary bladder, xanthoma, cystoscopy

## INTRODUCTION

Xanthoma is a reactive proliferation of lipid-containing histiocytes often developing in response to alteration in serum lipids. It most frequently occurs in skin, subcutaneous tissue, palpebrae and tendons. Xanthoma of the urinary bladder mucosa is very rare.<sup>[1]</sup>

## CASE REPORT

A 46-year-old woman was seen with urgency and incontinence for 10 years. She had undergone Caesarean section on two occasions, the last one being 14 years earlier. Cystoscopy was performed as she had microhematuria. A yellowish slightly elevated nodule 5 mm × 5 mm was found on the dome of the bladder. She was not diabetic. Biopsy showed sheets of foam cells in the lamina propria of the bladder mucosa [Figure 1]. There was neither any inflammation nor evidence of malignancy. The foam cells were faintly positive for PAS and negative for PASD. Von Kossa and iron stains were negative. On immunohistochemistry, the cells were negative for



**Figure 1:** H and E, ×200, Bladder mucosal biopsy with sheets of foamy histiocytes in the lamina propria

Cytokeratin and positive for CD68 [Figure 2] confirming their histiocyte/macrophage origin.

## DISCUSSION

Xanthomas are non-neoplastic, tumor-like lesions, which occur in essential hyperlipidemia, diseases with secondary hyperlipidemia, like primary biliary cirrhosis and diabetes mellitus and occasionally in normolipidemic states.<sup>[2]</sup> It has been suggested that endothelial, stromal, histiocytic and, rarely, epithelial cells may be transformed into xanthoma cells. Xanthomas can also be secondary to local surgeries, trauma or inflammation.<sup>[3]</sup> Xanthomas of the urinary bladder are extremely uncommon and 12 cases have been reported in English medical literature so far.<sup>[1]</sup> Many of the cases have been reported from Japan.<sup>[1,2]</sup> Patients are often asymptomatic or may present with hematuria or lower abdominal pain. In most cases, the lesions were located at the dome of the bladder. When large, the lesion may mimic malignancy, clinically and radiologically. The coexistence

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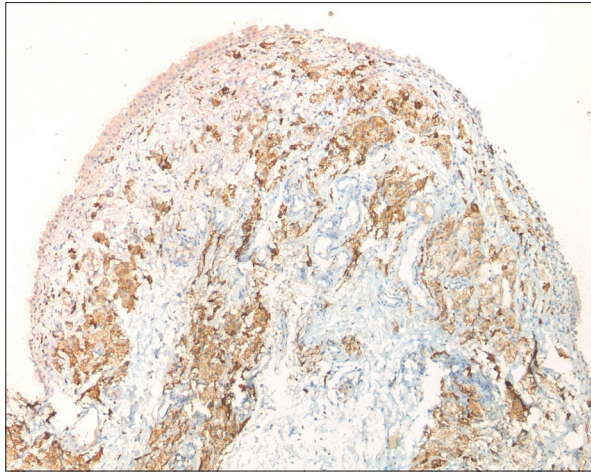


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**Figure 2:** CD68, X100, Foamy cells are positive for CD68, a macrophage marker

of xanthoma and transitional cell carcinoma has been reported in a case with a diverticulum of the bladder.<sup>[4]</sup>

Histologically, foamy cells in the bladder mucosa can occur in xanthogranulomatous cystitis, malakoplakia, atypical mycobacterial infection and signet ring cell carcinoma. Of these, it is difficult to distinguish bladder xanthoma and malakoplakia by gross appearance alone. The histiocytes in malakoplakia are associated with small basophilic extracellular or intracytoplasmic calcospherules called Michaelis-Gutmann bodies which stain positive for von Kossa stain, iron and PAS. These structures are

absent in xanthoma. The differences between xanthoma and xanthogranulomatous cystitis is that the latter has multinucleated giant cells and chronic inflammatory cells in addition to xanthoma cells, which are not seen in xanthomas.<sup>[1]</sup>

Conservative treatment with antibiotics does not resolve these lesions and complete surgical resection is advised. Some authors advocate follow-up cystoscopy, since xanthoma may complicate a bladder tumor.<sup>[2,4]</sup> But others are of the opinion that long-term follow-up is unnecessary as the lesion remains static and is not premalignant.<sup>[1,5]</sup>

## REFERENCES

1. Al-Daraji WI, Varghese M, Husain EA, Abellaoui A, Kumar V. Urinary bladder xanthoma: A report of 2 rare cases highlighted with anti-CD68 antibody. *J Clin Pathol* 2007;60:844-5.
2. Nishimura K, Nozawa M, Hara T, Oka T. Xanthoma of the bladder. *J Urol* 1995;153:1912-3.
3. Miliauskas JR. Bladder xanthoma. *Histopathology* 1992;21:177-8.
4. Skopelitou A, Mitselou A, Gloustanou G. Xanthoma of the bladder associated with transitional cell carcinoma. *J Urol* 2000;164:1303-4.
5. Kobayashi F, Kume H, Tomita K, Kitamura T. Xanthoma of the urinary bladder. *Scand J Urol Nephrol* 2005;39:527-8.

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