

# BLADDER CANCER OR AMYLOIDOSIS OF THE BLADDER? CHALLENGES IN DIAGNOSIS AND MANAGEMENT

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## Introduction

Primary bladder amyloidosis is a rare condition involving the extracellular deposition of amyloid proteins in the bladder. This localized form is unusual in the urinary system and often mimics urothelial carcinoma, creating diagnostic challenges due to similar clinical and imaging characteristics. Given its rarity and potential for misdiagnosis, we present a case of recurrent primary bladder amyloidosis and insights from a systematic review to improve understanding of this challenging disease.

## Methods

A systematic literature review was conducted in October 2024 following PRISMA guidelines, focusing on recurrence rates, treatment outcomes, and follow-up strategies in bladder amyloidosis cases. Searches were performed in PubMed, Embase, and Cochrane CENTRAL. Additionally, we retrospectively analyzed the case of a patient presenting with multifocal bladder amyloidosis and recurrent hematuria.

## Results

A 65-year-old male presented with intermittent, painless hematuria over 15 months. Imaging revealed irregular thickening of the bladder wall with calcifications, and cystoscopy identified multifocal yellowish lesions on the bladder dome. Biopsy confirmed primary bladder amyloidosis. Initial transurethral resection of the bladder tumor (TURBT) relieved symptoms, but recurrence was observed 24 months later, requiring a second TURBT, which was successful.

Primary bladder amyloidosis is rare and often mimics malignancy due to similar clinical presentations. TURBT effectively manages symptoms, but recurrence is frequent, necessitating long-term surveillance. Our systematic review indicated a 35% recurrence rate, with a median of 20 months to first recurrence. Close follow-up with cystoscopy every 1-3 years is advised to monitor for potential malignancy. Bladder amyloidosis remains a local disease; however, distinguishing it from systemic amyloidosis is crucial to avoid potential systemic complications.

## Conclusions

Primary bladder amyloidosis is a rare but important differential diagnosis for hematuria in middle-aged patients. Regular surveillance is recommended due to the high recurrence rate, with TURBT as the mainstay treatment. This case report and systematic review emphasize the need for awareness of this condition to ensure accurate diagnosis and long-term management.

## References

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