

# Imaging features of inflammatory myofibroblastic tumour in the urinary bladder

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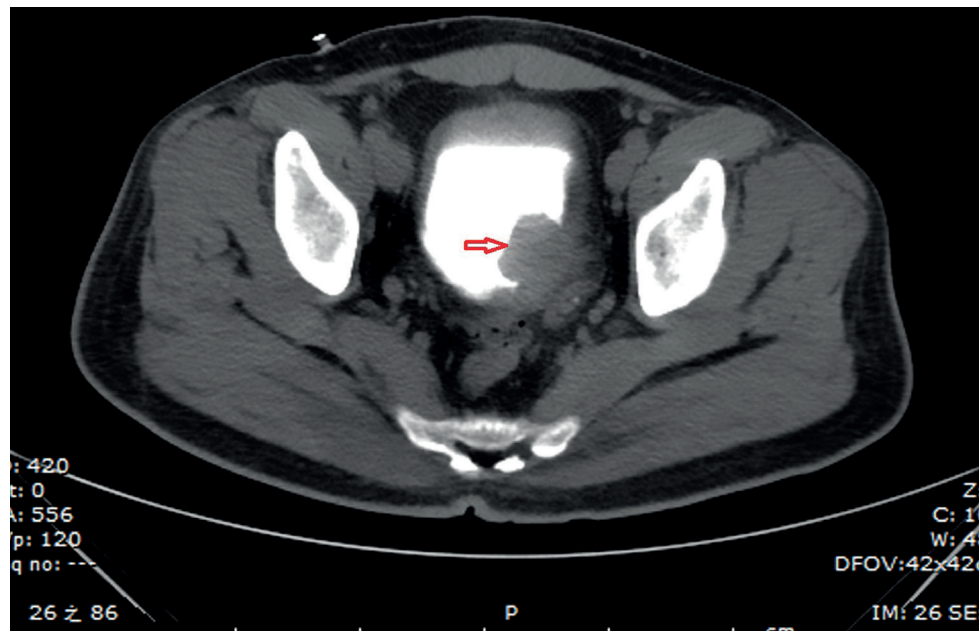
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Inflammatory myofibroblastic tumour rarely occurs in the urinary bladder. A 24-year-old man presented with painless visible haematuria. Computed tomographic urography showed a filling defect shadow on the left posterior wall of the bladder (Figure 1, red arrow). Immunohistochemical staining showed the tumour cells were positive for anaplastic lymphoma kinase, vimentin and pan CK. Surprisingly, diffuse and strong positive expression of vimentin and pan CK were observed simultaneously, which might have led to a misdiagnosis as sarcomatoid carcinoma, based solely on co-expression of vimentin and pan CK. However, the combination of these imaging features with the histopathological findings confirmed a diagnosis of inflammatory myofibroblastic tumour.

The authors recommend the use of computed tomographic urography as a first-line screening tool for patients with haematuria (Tan et al, 2018). The combination of computed tomographic urography with histopathology will significantly increase the diagnostic performance (Zeng et al, 2018). They propose multimodality management of patients with inflammatory myofibroblastic tumour including surgery along with pathology and imaging features to avoid misdiagnosis.



**Figure 1.** Cross-sectional computed tomographic urography demonstrating a filling defect shadow on the left posterior wall of the bladder (red arrow).

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## References

- Tan WS, Sarpong R, Khetrpal P et al. Can renal and bladder ultrasound replace computerized tomography urogram in patients investigated for microscopic hematuria? *J Urol*. 2018;200(5):973–980. <https://doi.org/10.1016/j.juro.2018.04.065>
- Zeng X, Huang H, Li J et al. The clinical and radiological characteristics of inflammatory myofibroblastic tumor occurring at unusual sites. *BioMed Res Int*. 2018;2018:1–8. <https://doi.org/10.1155/2018/5679634>