

## Renal Papillary Hypertrophy: A Rare Cause of Visible Haematuria, A Case Report

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**Abstract :** Introduction: Investigations for visible haematuria are well established with the intention of diagnosing malignancy. Benign mimics of malignant processes can pose a diagnostic challenge and require careful investigation to avoid misdiagnosis and subsequent mismanagement. One rare mimic of upper tract urothelial carcinoma is renal papillary hypertrophy. We report a case of bilateral renal papillary hypertrophy presenting with haematuria. Case presentation: A 37-year-old male was referred to Urology with a three-week history of intermittent visible haematuria. He had no relevant past medical history. CT urogram showed a rounded area of increased density within the inferior aspect of the left renal pelvis of uncertain significance. Subsequent CT with a delayed urographic phase showed filling defects bilaterally in renal calices concerning bilateral renal transitional cell carcinoma. The patient underwent bilateral diagnostic flexible ureteroscopy (f-URS). Retrograde pyelograms showed bilateral filling defects. Direct visualization with f-URS showed prominent hypertrophied renal papilla. Biopsies were taken bilaterally. Histology revealed normal-appearing tissue from the renal collecting system only. The patient was managed conservatively, and he has been asymptomatic for 24 months post-FU-RS. Discussion: Renal papillary hypertrophy or hyperplasia is a rare cause of haematuria, which can mimic renal malignancies. Nine previous cases have been reported in the literature. The earliest cases from the 1950s and 60s were diagnosed following nephrectomy for symptomatic patients with flank pain and/or visible haematuria. More recent cases were mainly confirmed on f-URS. The majority of cases were managed conservatively and, on follow-up, were asymptomatic. Two cases were treated with holmium laser ablation due to active oozing on f-URS or significant protrusion into the renal pelvis. Conclusion: Renal papillary hypertrophy should be considered in the differential diagnosis of unexplained haematuria. Careful clinical evaluation is crucial for proper diagnosis and management. Conservative management remains the mainstay of treatment.

**Keywords :** renal papillary hypertrophy, renal cancer, haematuria, upper tract lesion

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