

Tumor Masses in Urine in Wilms Tumor

Wilms tumor commonly presents with an abdominal mass, hematuria and hypertension. We report an unusual case who presented with tumor masses in the urine. Such a finding has not been previously reported.

A 5-year-old boy presented with history of hematuria and passage of grayish white worm-like structures in urine on 3 occasions (*Fig. 1*). Each time, the child developed urinary obstruction for some time and then passed the mass in urine. On examination the child was pale, normotensive and showed an abdominal mass of 6.5 cm by 8 cm size in the right lumbar area. Ultrasound examination of abdomen detected a mass involving right kidney with multiple necrotic areas. The left kidney was normal. There was no lymph node involvement. The material, passed in the urine, on histopathological examination was suggestive of Wilms tumor.

The child was treated with parenteral vincristine and actinomycin D. The size of the mass reduced within the next 6 weeks, radical nephrectomy was done thereafter. Histopathological examination of the specimen confirmed the diagnosis of Wilms tumor.

Urothelial tumors specially bladder papillomas are known to shed cells in the urine. Since renal tumors are not in direct contact with urothelium, malignant cells are not detected on urine examination (1). Our patient passed tumor mass and necrotic material in the urine. The diagnosis of tumor



Fig. 1. Tumor mass in urine.

was suggested following histopathological examination of this material. Hematuria is common in Wilms tumor and indicates that the lesion is in communication with the urinary bladder (2). However to the best of our knowledge passage of tumor masses in urine has not previously described.

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