

Wilms' tumour

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See also Chapter 17 . This is the most common tumour of childhood, accounting for 5% of all childhood cancers. They are bilateral in 5% of cases and familial in 1%. The tumour has mixed elements derived from the embryonic nephrogenic tissue, namely blastemal or undifferentiated tissue, epithelial tubules and stroma. The typical presentation is a child aged between 1 and 4 years of either gender with a large, palpable abdominal mass that may cross the midline. It may also be associated with haematuria, hypertension, fever and weight loss. Pain is relatively uncommon. The large tumour can rupture and present as an acute abdomen. Other causes of renal masses include neuroblastoma, congenital mesoblastic nephroma, RCC, clear-cell sarcoma and rhabdoid tumour. US can confirm the renal origin and solid nature of the mass. Further definitive imaging with either CECT or MRI is necessary to stage the disease. Up to 13% of patients have bilateral tumours. The tumours usually infiltrate the kidneys and normal renal parenchyma is compressed at the periphery around the tumour (claw sign). A CT of the chest should be obtained as the lung is the most common site of distant metastasis. Current treatment is nephrectomy with pre- or postoperative chemotherapy. Both regimes have a comparable survival of ~90%. Tumours of the kidney and ureters /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF Brierley JD, Gospodarowicz MK, Wittekind C (eds). TNM classification of malignant tumours, 8th edn. Oxford: Wiley, 2016. Available from <https://www.uicc.org/8th-edition-uicc-tnm-classification-malignant-tumors-published/>. Khan F, Ahmed K, Lee N et al. Management of ureteropelvic junction obstruction in adults. *Nature Rev Urol* 2014; 11 (11): 629-38. Moore EE, Shackford SR, Pachter HL et al. Organ injury scaling: spleen, liver, and kidney. *J Trauma* 1989; 29 (12): 1664-6.

Rule out urothelial malignancy in high-risk adults (chronic smokers, occupational exposure, older age) with microscopic haematuria Nephron-sparing surgery should be considered in small renal masses to preserve renal function, more so in patients with compromised renal function PNs are found in up to 30% and IVC tumour thrombus in 5-10% of patients with RCC Targeted therapy and immunotherapy have improved survival in metastatic RCC Wilms' tumour is the most common renal tumour in children <15 years old and should be treated in a multidisciplinary setting

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