Leukemic Renal Infiltration
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History
3 year old with 6 week history of increasing abdominal distention.

Diagnosis
Leukemia

Additional Clinical
CBC: WBC 6.6k, Hgb 13.4 g, Hct 40.9, plt 206k
Recent streptococcal throat infection.

Discussion
Acute lymphoblastic leukemia (ALL), acute myelogenous leukemia (AML), and juvenile myelomonocytic leukemia are common forms of leukemia in children. Extramedullary involvement is often seen in T-cell ALL and the M4 and M5 subtypes of AML. Nephromegaly is a common manifestation of leukemic infiltration; nephromegaly may be mild or marked. Peripheral wedge shaped, round and ill-defined defects can also be seen. Despite renal involvement, function is usually not compromised. Other visceral infiltration can be seen including brain, liver, bone, spleen, lymph nodes, and thymus.

Findings
CT-Massive nephromegaly with striated nephrogram.
MR-Axial and coronal images demonstrate massive nephromegaly.
US-Massive nephromegaly with normal color Doppler flow.

Reference
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