Renal Vein Thrombosis and Adrenal Hemorrhage
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History
Clinically unstable term neonate.

Diagnosis
Renal Vein Thrombosis and Adrenal Hemorrhage

Discussion
Renal vein thrombosis (RVT) is thought to primarily develop in dehydrated fetuses and newborns which may be potentiated by other hypercoagulable states. RVT is commonly associated with maternal diabetes. The thrombi are most commonly located peripherally; however thrombosis of the interlobar and larger renal veins may extend all the way into the IVC. Left sided thrombosis may cause adrenal enlargement and hemorrhage. Findings on US examination demonstrate increased renal size, increased echoes and abnormal architecture. The kidneys themselves are irregularly hemorrhagic and diffusely edematous. The parenchyma appears inhomogeneous and hyperechoic. There can be either unilateral or bilateral involvement. In surviving infants, 30% develop characteristic calcification of the intrarenal veins.

Findings
US-Initial Examination: Enlarged left kidney with poor cortico-medullary differentiation, avascular suprarenal hypoechoic collection and loss of renal vein phasicity. Follow up Examination: Linear calcifications at the cortico-medullary junction, improved cortico-medullary differentiation and interval decrease in renal size.

Reference

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