Crossed Renal Ectopia With Fusion

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Frequent urinary tract infections and unexplained hypertension (160/100 mm Hg) occurred in a 38-year-old man with no significant medical history. The heart and chest were normal; a right lower quadrant mass was detected in the abdomen. Red blood cells were found in the urine. An abdominal CT scan demonstrated that the left kidney was fused to the lower pole of the right kidney with the left pelvicaliceal system to the left of the midline; these findings are consistent with crossed fused renal ectopia. Cystographic and cystoscopic examinations were normal.

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Drs Pawan Rao, Hesham Taha, Gamil Kostandy, and Alice Veloudios of New York Methodist Hospital, Brooklyn, write that crossed renal ectopia with fusion is a rare anomaly of the kidneys; the reported incidence is 1 in 7000 postmortem examinations. However, the incidence at autopsy is higher than in the clinical setting, since many cases are unrecognized during life.

Crossed renal ectopia with fusion is twice as common in men; left to right ectopia is seen 3 times more often than right to left. The crossed kidney usually lies caudal to the normal counterpart on that side. The most common presentations are frequent urinary tract infections, stones, and hematuria.

Crossed renal ectopia with fusion is a surgical challenge because of the anatomic position and anomalous blood supply. Investigate the entire system when a urinary tract abnormality of position, shape, or fusion is detected, since multiple anomalies are not uncommon. Include intravenous pyelography, cystoscopy, and aortography in your workup. Direct treatment toward the complication and the associated anomalies. This patient responded well to angiotensin-converting enzyme inhibitors that were given to control the hypertension.

REFERENCES:

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