IMAGING

Routine imaging unnecessary after blunt renal trauma

Routine follow-up imaging for patients who have experienced blunt renal trauma provides little information regarding complications and does not improve outcomes, according to a study from Cork University Hospital, Ireland.

Renal injuries are graded according to the American Association for the Surgery of Trauma (AAST) kidney injury scale to predict the need for surgery. Low-grade injuries are commonly managed conservatively with repeat imaging to identify complications as early as possible.

Kieran Breen and his team report that 102 patients were admitted to their hospital with renal trauma (98 blunt, four penetrating) between 2000 and 2012. 77% of injuries were low grade and 23% were high grade according to the AAST scale. All patients were managed conservatively; 38 patients underwent follow-up CT at least once and 31 patients underwent reimaging with renal ultrasonography.

Researchers found that imaging data did not predict any of the complications reported by their cohort (3% of patients with low-grade injuries and 21% of patients with high-grade injuries) or trigger any interventions. Instead, all patients who developed complications either presented with clinical symptoms or had laboratory findings (such as leukocytosis or hypertension) indicative of complications.

Thus, Breen and colleagues suggest a selective approach to reimaging, whereby imaging is triggered by symptoms or abnormal laboratory tests, to reduce both unnecessary exposure to radiation and cost.

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Original article Breen, K. J. *et al.* Adult blunt renal trauma: routine follow-up imaging is excessive. *Urology* doi:10.1016/j.urology.2014.03.013