

Reducing CT Scans in Children with Minor Blunt Head Trauma



For every hour of observation of children with minor blunt head trauma in the emergency department, CT scans were reduced by approximately 70 percent on average, according to a study published published online in Annals of Emergency Medicine.

"Every hour of observation time in the emergency department was associated with a decrease in CT rates for children whether at low, intermediate or high risk of traumatic brain injury," said lead author Lise E. Nigrovic, MD, MPH, of Boston Children's Hospital in Boston, Mass. "Furthermore, observation prior to CT decision-making for children with minor blunt head trauma was associated with reduced CT use without an observed delay in the diagnosis of significant traumatic brain injury."

Emergency physicians observed approximately half (49 percent) of the 1,381 enrolled children with minor blunt head trauma prior to deciding whether to obtain CT scans. The symptoms improved for most children during the period of observation. Every year, more than half a million children come to the emergency department for evaluation of blunt head trauma, but very few will have significant traumatic brain injury.

"As emergency physicians, we must balance the possibility of missing a clinically significant traumatic brain injury with the future risk of malignancy associated with ionising radiation exposure," said Dr. Nigrovic. "Observation prior to CT decision-making has the potential to further reduce CT rates without missing children with significant injuries, further improving the emergency care of children with minor blunt head injury."

Source: American College of Emergency Medicine

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