

Most kids with blunt torso trauma can skip the pelvic X-ray

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Pelvic x-rays ordered as a matter of course for children who have suffered blunt force trauma do not accurately identify all cases of pelvic fractures or dislocations and are usually unnecessary for patients for whom abdominal/pelvic CT scanning is otherwise planned. A study published online in *Annals of Emergency Medicine* last week casts doubt on a practice that has been recommended by the Advanced Trauma Life Support Program (ATLS), considered the gold standard for trauma patients ([Sensitivity of Plain Pelvis Radiography in Children with Blunt Torso Trauma](#)).

"Abdominal/pelvic CT is a superior diagnostic test compared to plain anteroposterior pelvic x-rays for diagnosing children with [pelvic fractures](#) or dislocations," said lead study author Maria Kwok, MD, MPH, of Columbia University Medical Center in New York, N.Y. "Because of concerns about lifetime exposure to radiation in children, appropriate use of radiography is important. We just could not find enough accuracy or utility to justify the pelvic x-ray for most of these children."

Plain pelvic x-rays had a sensitivity of only 78 percent for identifying [patients](#) with pelvic fractures or dislocations. Of the patients not correctly identified as having pelvic fractures or dislocations, 98 percent were correctly diagnosed by abdominal/pelvic CT scans.

Plain pelvic x-rays are useful only for hemodynamically unstable patients and for hemodynamically stable patients who the physician

believes may have pelvic fractures or dislocations but who are not otherwise undergoing abdominal/pelvic CT scanning.

The highest risk for pelvic fractures or dislocations included pedestrians or bicyclists struck by moving vehicles and injuries involving motor vehicle collisions. Low-level falls or bicycle accidents were rarely diagnosed with pelvic fractures or dislocations. None of the 281 patients in the study who fell down stairs were diagnosed with pelvic fractures or dislocations.

"CT scanning should not be used as a primary screening tool if no clinical evidence of pelvic fracture or dislocation exists," said Dr. Kwok. "A physical examination and clinical judgment are still the first line in determining which patients need advanced imaging and which can safely skip it."

Provided by American College of Emergency Physicians

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