Postambulatory Radiographs Do Not Change Management of Pelvic Ring Injuries

Luke Nicholson, MD¹; Hardik Parikh, BA¹; Geoffrey Marecek, MD²; ¹University of Southern California, Los Angeles, California, USA; ²Keck School of Medicine of University of Southern California, Los Angeles, California, USA

Purpose: Controversy exists regarding the management of pelvic ring injuries with minimal displacement. Management of lateral compression (LC) and anterior-posterior compression (APC) injuries is dependent on the potential for fracture displacement with nonoperative management. One technique for the management of potentially unstable pelvic ring injuries is to obtain postambulatory pelvic radiographs to evaluate for interval displacement of the injury necessitating surgical intervention.

Methods: All patients presenting to the authors' institution between 2012-2014 with pelvic ring injuries for which postambulatory radiographs were obtained were retrospectively identified. All injuries were classified by CT scan according to the AO/OTA pelvic ring classification. Patients were excluded if postambulatory films were obtained more than 6 weeks from the date of injury.

Results: 85 patients met inclusion criteria. There were 15 OTA 61-A type fractures, 49 OTA 61-B type fractures, and 21 OTA 61-C type fractures included. Postambulatory radiographs were obtained an average of 8.8 days after the date of injury while the patient was an inpatient. In no cases did review of postambulatory films change the initial management decision. All patients were managed nonoperatively. 50 patients were available for outpatient follow-up at a mean of 12.3 weeks postinjury. No patients were converted to operative management at time of final follow-up.

Conclusion: The routine use of postambulatory radiographs to evaluate for occult pelvic instability does not change management of pelvic ring instability. If the pelvic ring injury pattern is one at high risk for displacement or the patient's clinical examination suggests instability, a more appropriate tool to evaluate for instability may be a fluoroscopic examination under anesthesia.

The FDA has stated that it is the responsibility of the physician to determine the FDA clearance status of each drug or medical device he or she wishes to use in clinical practice.