A Reliable Treatment Algorithm for Transverse Acetabular Fractures With Ipsilateral 61B1 and 61B2 Injuries

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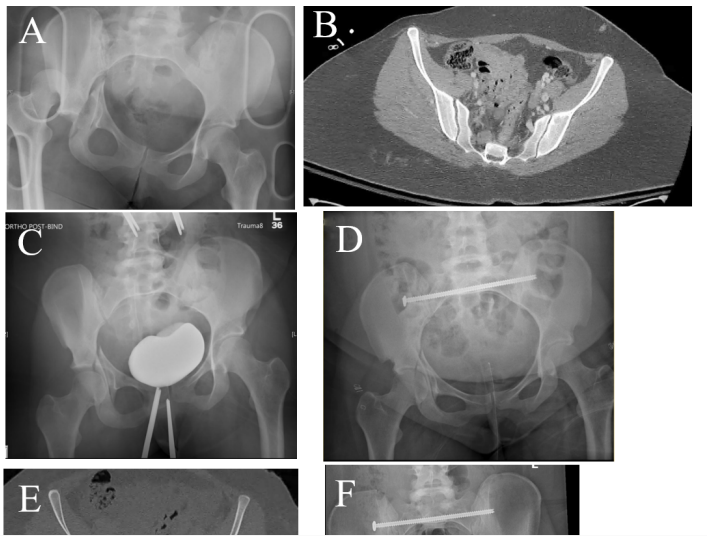
Purpose: Our objective was to describe a surgical technique and clinical outcomes of transverse or transverse-variant acetabular fractures with ipsilateral 61B pelvic ring injuries treated with a reproducible surgical technique.

Methods: The study was conducted at a Level-I trauma center after obtaining IRB approval. Our technique involves external fixator-assisted reduction of the pelvic ring injury and stabilization with iliosacral screws, followed by open reduction and internal fixation of the acetabular fracture. Patients who sustained transverse or transverse-variant acetabular fractures with ipsilateral 61B pelvic ring injuries undergoing fixation with this technique were included. The primary outcomes of the study were reduction quality, osseous union, and pain-free ambulation, determined by reviewing medical records and radiographs. Secondary outcome variables included intraoperative estimated blood loss (EBL), length of stay, early medical and surgical complications, and persistence of pain.

Results: 14 patients were identified with a mean age of 38.7 years (range, 25-63). Nine were male, and 5 were female. Six patients presented with unstable hip dislocations that were reduced and maintained with a sheet centered around the iliac crests and distal femoral skeletal traction. The 2 most common patterns were transverse or transverse/posterior wall acetabular fractures with a 61B2 pelvic ring injury (3 each). One patient passed away due to a cardiac event. There were no complications encountered. All patients went on to successful union and no implant failures were seen. No additional procedures were performed, and all patients were ambulatory and pain-free at final follow-up.

Conclusion: We describe a technique for managing transverse and transverse-variant acetabular fractures with ipsilateral 61B pelvic ring injuries. The management of this injury pattern is challenging, but if the diagnosis is made, our technique is safe, reliable, and reproducible.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