

## Spino-pelvic fixation for vertically unstable type C fractures of the pelvis

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### Abstract

Background: Evaluating the radiological and functional results of surgical treatment of unstable pelvic injuries by spinopelvic fixation. The purpose of this study was to find out whether the surgical technique can reduce fractures of the sacrum and dislocations of the sacroiliac joint and provide pelvis with stable fixation. Methods: Ten vertical shearing pelvic fractures were treated by pedicular screw placement in L<sup>5</sup> vertebra and in the wing of the ilium. According to Tile's classification system, there were 10 type C fractures (4 type C1, one type C2 and one type C3). The patients were evaluated by plain radiographs at a mean follow-up period of 2 years (range 1-2 years) after surgery. Results: The patients had a mean age of 37.2 years at the time of surgery. The fracture was reduced by skeletal traction under general anesthesia and in prone position. A pedicular screw was placed in L<sup>5</sup> vertebra on the same side of the fracture. Another screw was placed into the pelvic wing from PSIS (posterior superior iliac spine) toward AIIS (anterior inferior iliac spine). A molded titanium rod connected these two pedicular screws. Conclusion: This study supports the use of screw and rod system for posterior fixation of the VS injuries of the pelvis. © Iranian Red Crescent Medical Journal.

### Author keywords

Iliolumbar fixation; Ilium screw; Pelvic fracture; Sacroiliac rupture

### Indexed Keywords

**EMTREE drug terms:** titanium

**EMTREE medical terms:** adult; article; bone screw; clinical article; follow up; fracture fixation; fracture reduction; general anesthesia; human; iliac bone; joint dislocation; lumbar vertebra; patient positioning; pelvis fracture; pelvis radiography; sacroiliac joint; sacrum; skeleton traction; surgical technique; treatment response

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