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The Literature

Tile, M., Helfet, D. L., Kellam, J. F., & Vrahas, M. (1995). Fractures of the pelvis and acetabulum (pp. 419-495). Baltimore: Williams & Wilkins.

Elsissy, J. G., Ruckle, D. E., LeBrun, C., & Johnson, J. P. (2024). Pelvic Ring Injuries: Stable or Not?. JAAOS-Journal of the American Academy of Orthopaedic Surgeons, 32(3), 99-107.

Is the pelvic ring injury stable?

Tips & Tricks from ESTES Education in collaboration with the Polytrauma section

The Problem

The stability of the pelvic ring injury defines the treatment strategy

The Challenge

Stability of the pelvis is difficult to assess

The Evidence

- 80% of the pelvic ring stability is defined by the posterior structures and 20% of the stability is defined by the anterior structures
- Isolated anterior injuries after blunt trauma are rare and injuries to the posterior ring must be excluded
- Injuries to the posterior ring leading to impaired stability include fractures of the sacrum or ligamentous disruptions

Tips & Tricks

Stable fracture?

A-type fracture

Rotational instability?

B-type fracture

Rotational and vertical instability?

C-type fracture

Symphysis diastase 1-2.5cm

Unstable open book fracture

Check for secondary hints: e.g. fractures of the transverse process L5

Conclusion

The unstable pelvic ring injuries requires at least posterior stabilization followed by anterior stabilization