

Clinical implications of additional posterior fractures in combined anterior-posterior pelvic ring fractures in elderly patients

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Introduction

Combined anterior and posterior (A+P) pelvic ring fractures (PRF) are expected to be less mechanically stable and to be associated with higher levels of pain and reduced mobility. The current study investigates the clinical relevance of combined A+P PRF in elderly patients.

Method

A prospective multicentre cohort study was conducted in patients >70 years of age with anterior PRF after low-energy trauma diagnosed on conventional radiographs. All patients underwent an additional CT-scan and were divided into two groups; isolated anterior or combined A+P fractures. If patients could not be mobilised after conservative treatment, surgical fixation was performed. Pain scores, dependence on walking aids and Activities of Daily Living scores (ADL) were measured.

Results

102 patients (mean age 81.1 yrs.) were included. Isolated anterior fractures were diagnosed in 25 and A + P fractures in 77 patients. Only 5% underwent surgical fixation after failure of conservative treatment. At 2–4 weeks post trauma, patients with A + P fractures had similar median pain scores (3 vs. 5, $p=0.19$) and ADL scores (85 vs. 78.6, $p=0.67$), but were more dependent on walking aids (92.8% vs. 72.2%, $p=0.02$) compared to isolated anterior fractures.

Conclusion

The vast majority of elderly patients with PRF have combined A + P fractures. The clinical implications of additional posterior pelvic ring fractures in elderly patients appears to be limited.