

Rehabilitation protocols for surgically treated acetabular fractures in older adults: Current practices and outcomes

Scoping Review

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Background

Rehabilitation after acetabular fractures in older adults remains controversial, particularly regarding immediate full weight-bearing. It is often advocated that full weight-bearing (FWBAT) should begin immediately, with a joint replacement strategy (ORIF and acute THA, revision THA) providing better support compared to a joint-preservation concept (ORIF alone).

Purpose

This study aims to evaluate the literature on postoperative rehabilitation protocols for older adults treated surgically for displaced acetabular fractures, focusing on weight-bearing guidelines and specific treatments like ORIF, ORIF with THA, and revision THA. It also explores whether surgeons frequently prescribe FWBAT and if it is more common compared to ORIF alone.

Methods

This scoping review was conducted according to the PRISMA guidelines to analyze articles on older orthopaedic patients (≥65 years) with native acetabular fractures treated operatively that offered information on the postoperative rehabilitation. A literature search was performed in PubMed, EMBASE, and the Cochrane Library from January 1, 2006, to March 31, 2024. Patient demographics and comorbidities, fracture type, surgical strategy, weight-bearing capacity, and risks of postoperative complications were systematically analyzed by two reviewers to describe the basis for selecting tailored rehabilitation protocols.

Results

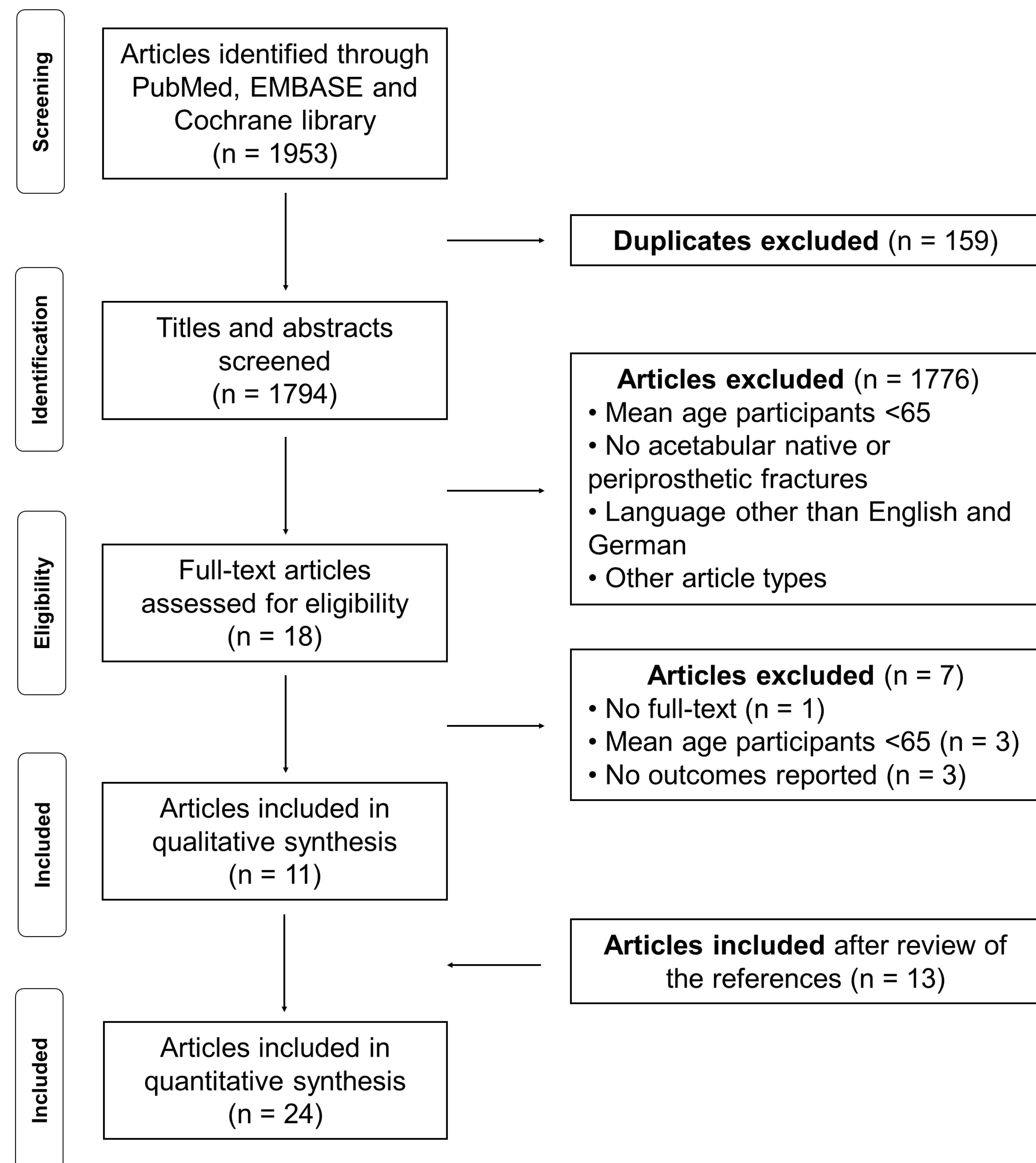
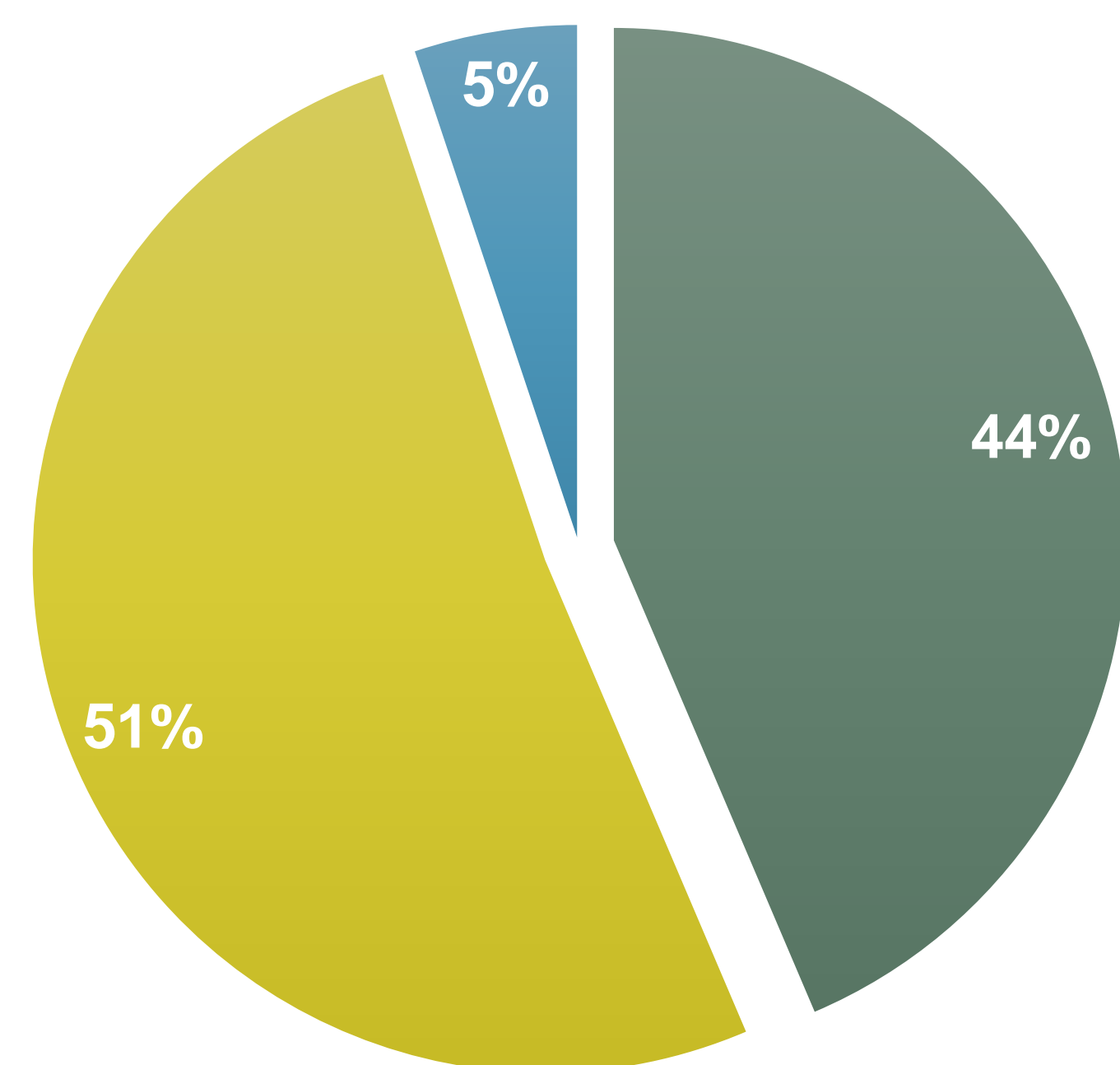


Figure 1: PRISMA flow diagram showing the systematic review protocol

Figure 2: In this review including 24 studies, a cumulative number of 1434 patients were treated with ORIF alone or ORIF and acute THA



■ 1. ORIF ■ 2. ORIF & acute THA ■ 3. Revision THA

Figure 3: Rehabilitation protocols varied, with specifics on postoperative weight-bearing reported in 16 studies.

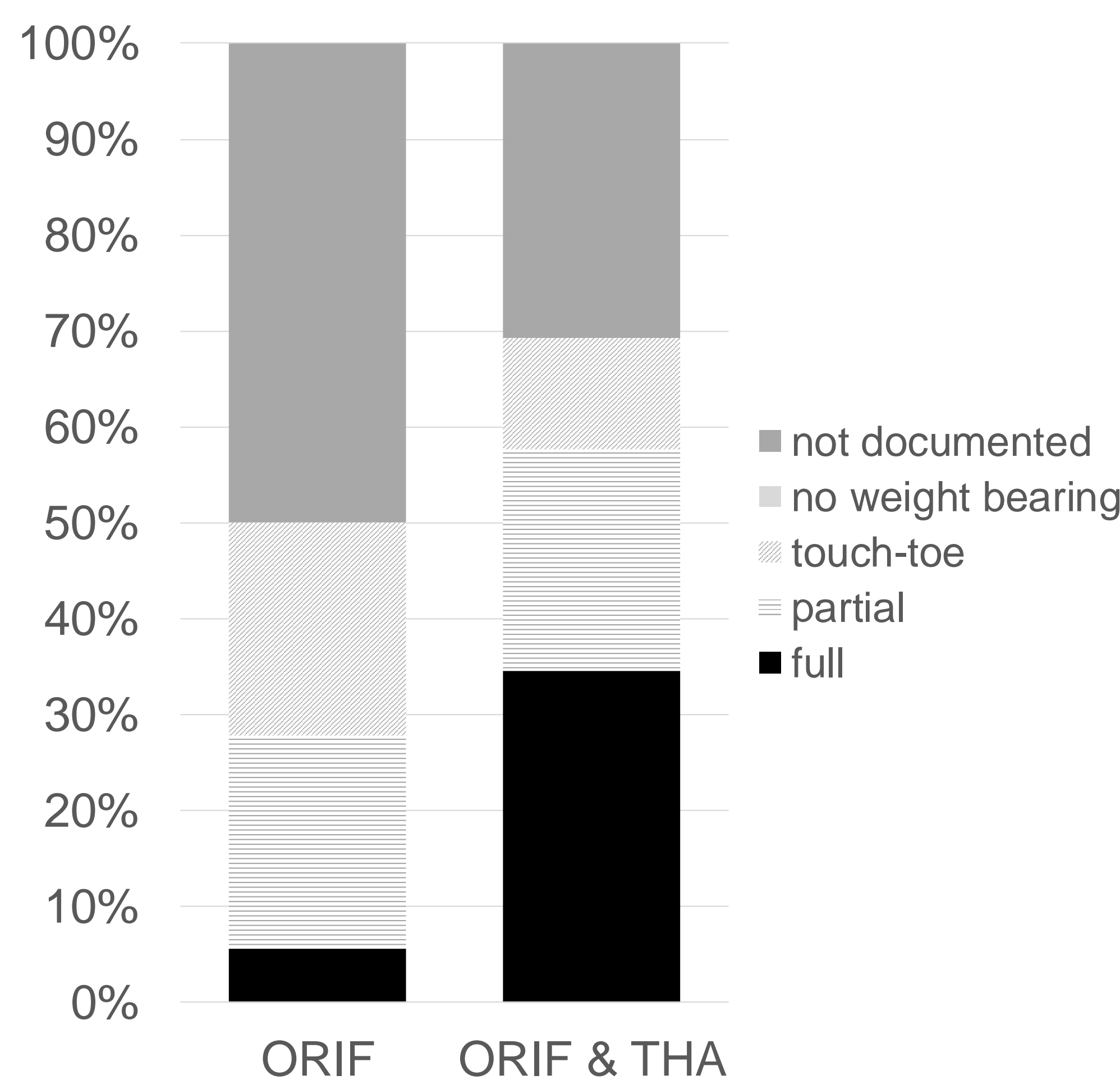
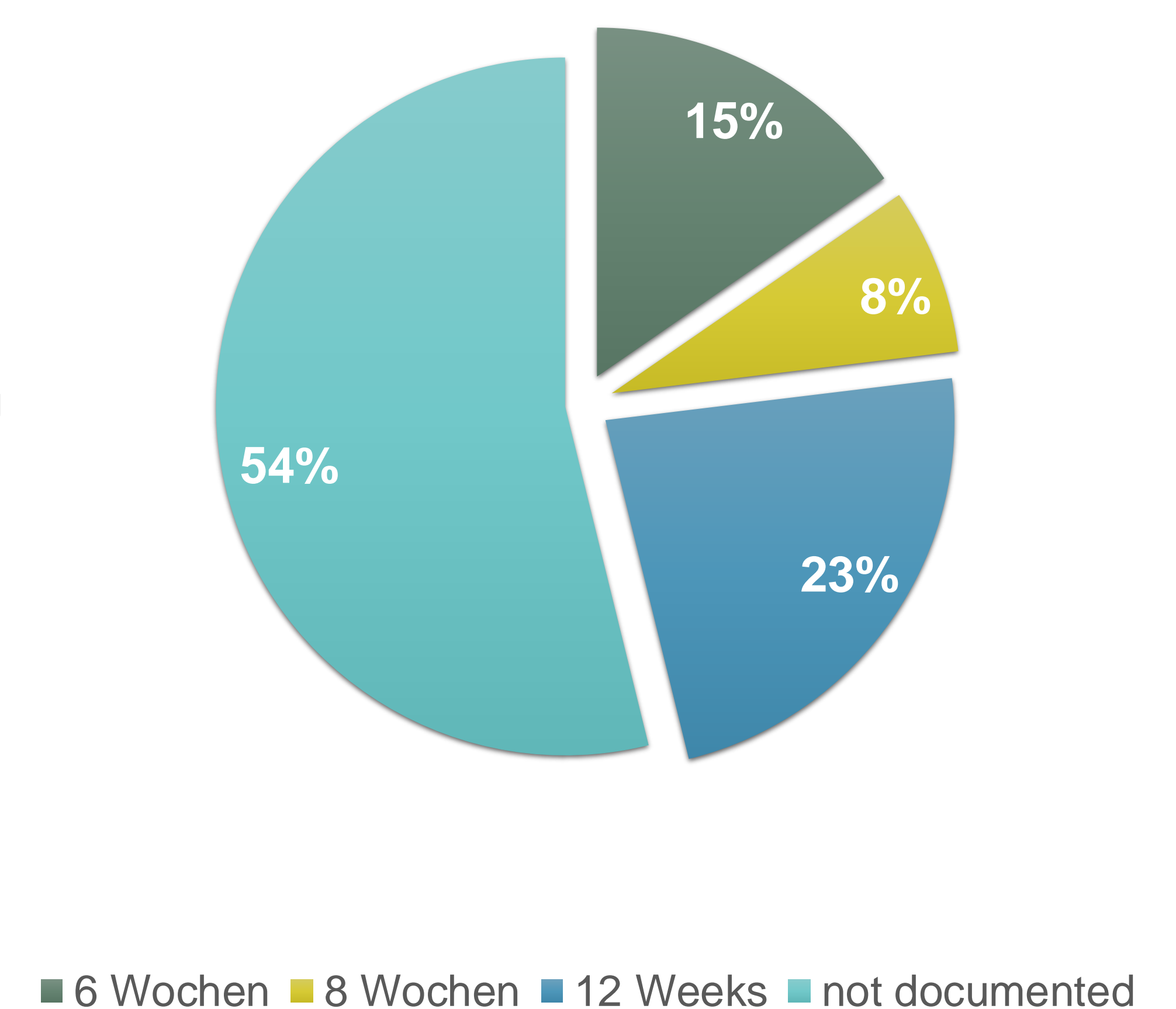


Figure 4: The duration of postoperative weight-bearing restrictions ranged from 6 to 8 weeks in four studies and up to 12 weeks in five, with 14 studies not providing specific data.



■ 6 Wochen ■ 8 Wochen ■ 12 Weeks ■ not documented

Conclusion

These findings highlight the complexity of postoperative rehabilitation in older adults following acetabular fracture surgery. While ORIF alone often favors conservative approaches like partial and toe-touch weight-bearing, ORIF combined with THA more commonly favors full weight-bearing, reflecting greater confidence in the procedure's stability. However, even with THA, full weight-bearing is used in only about 50% of cases. Additionally, in a significant number of cases, the specific approach taken is not documented, making any conclusions about their benefits need to be interpreted with caution. This underscores the need for standardized reporting to enhance clinical decision-making and optimize care.