

COGNITIVE DECLINE SECONDARY TO ALZHEIMER'S DISEASE AND HIP FRACTURES IN THE ELDERLY: SYSTEMATIC REVIEW OF RISK FACTORS AND ORTHOPEDIC REPERCUSSIONS

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Abstract

Introduction: The global rise in life expectancy has been paralleled by an increase in neurodegenerative conditions, notably Alzheimer's disease (AD), which significantly raises the risk of falls and hip fractures among the elderly. **Objective:** Method: This systematic review explores the association between AD, fall risk, and hip fractures in older adults, emphasizing biomechanical vulnerabilities and orthopedic consequences. **Result:** Analysis of 23 studies indicates that AD greatly increases the likelihood of low-impact falls, especially indoors and during nighttime, frequently resulting in intertrochanteric and femoral neck fractures. Notable risk determinants include osteoporosis, sarcopenia, polypharmacy, and cognitive-motor impairment. Such fractures are linked to elevated morbidity and long-term disability, with up to 50% of patients failing to regain prior functional status, and one-year mortality rates reaching 30%. **Conclusion:** Multidisciplinary strategies and early intervention are essential in reducing the clinical and societal burden of these complex outcomes.

Keywords: Alzheimer; Elderly; fall risk.