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Hip Fracture Management Global Approaches and Systems

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Abstract

Hip fractures, among the most common geriatric injuries, are associated with adverse patient outcomes and significant costs. The incidence of these fractures continues to rise with an aging population worldwide. While many factors that negatively impact patient outcomes are nonmodifiable, others, which include pre- and postoperative medical management, timing of surgical stabilization, and fracture fixation methods, are modifiable and have been shown to affect outcomes. Treatment pathways are dependent upon available resources and established systems, and comparative guidelines from different regions and countries are not well documented. This special issue seeks to highlight regional differences in hip fracture care globally and represents a collaborative work of member societies of the International Orthopaedic Trauma Association, an international association of orthopaedic societies dedicated to the promotion of musculoskeletal trauma care through advancements in patient care, research, and education. The expectation is that better understanding these differences will aid efforts to better understand, improve, and standardize existing approaches to hip fracture management worldwide.

Keywords: global, hip fractures, international, musculoskeletal, systems

1. Introduction

The world's population is aging. Consequently, associated osteoporotic fractures represent growing societal medical, social, and financial challenges.^[1-3] Millions of adults sustain hip fractures a year globally, facing significant disability, serious complications, and substantial mortality rates.^[4-7] Worldwide, the overall incidence of hip fractures was estimated to be between 1.25 and 1.66 million in 1990, increasing to an estimated 4.5 to 6.5 million per year by 2050.^[8,9] While one-half of hip fractures occur in elderly patients in North America and Europe, substantial increases in the incidences of hip fractures in Asia and Latin America are playing a role in the overall increases in hip fractures globally; percentages in Asia alone are estimated to increase from 26% of all hip fractures in 1990 to 45% in 2050.^[8,9]

As patients age, their serious comorbidities also increase, further complicating treatments and outcomes.^[10] While many factors that contribute to adverse patient outcomes are patient-related and nonmodifiable, others, including pre- and postoperative medical management, method of surgical stabilization, and timing of operative intervention can be modified.^[11,12] To mitigate the substantial negative impacts on patients and burden of disease on health systems, countries, medical societies, hospitals, and physicians have worked to develop better pathways and standards for hip fracture management.^[12-16] Some countries have more highly developed standards, while others are in the early stages of creating optimal pathways, with many of the obstacles being created by financial barriers. Areas of focus have included management at initial presentation and preoperative evaluation (medical and cognitive), integrated medical care models, pain management, surgical timing and technique, postoperative management (medical, early mobilization, fall reduction, and bone health), and transition from hospital to ongoing care.^[17] Globally, treatment pathways are dependent upon available resources and established systems.

Comparative treatment guidelines for hip fracture care in different countries are not well-documented. This supplement seeks to describe the state of hip fracture systems in different regions and countries and represents a collaborative work of member societies of the International Orthopaedic Trauma Association, an international association of orthopaedic societies dedicated to the promotion of musculoskeletal trauma care through advancements in patient care, research, and education. The information in these reports will aid efforts to better understand, improve, and standardize existing approaches to hip fracture management worldwide.

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