
AGING POPULATION AND THE CHANGING PARADIGM OF HIP FRACTURE MANAGEMENT

How to cite this editorial

Sharma A, Aging Population and the Changing Paradigm of HIP Fracture Management. J Gandhara Med Dent Sci. 2025; 12(2):1-2

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As the global population ages, the issue of hip fractures in healthcare is becoming more significant. Once seen mainly as a concern for orthopedic surgeons, hip fractures are now recognized as a symptom of aging. The management approach has shifted to emphasize early mobilization, multidisciplinary collaboration, and comprehensive geriatric care. Traditionally, treatment focused on surgical fixation and postoperative rehabilitation. However, emerging evidence shows that a multidisciplinary approach improves patient outcomes. Hip fracture patients are often frail and have multiple comorbidities, necessitating medical intervention beyond orthopedic care. The involvement of geriatricians, especially ortho-geriatricians, is crucial for optimizing perioperative management and supporting long-term recovery. Recent studies underscore the growing burden of hip fractures worldwide. In 2019, approximately 4.1 million hip fracture cases were reported globally among individuals aged 50 and older.¹ Projections indicate that hip fractures will nearly double by 2050, primarily due to demographic shifts and an aging population.² This trend is particularly concerning for developing countries, where healthcare systems may face challenges in managing the increasing incidence of such injuries. Mortality rates associated with hip fractures remain alarmingly high. One-year all-cause mortality rates range from 14.4% in Singapore to 28.3% in the United Kingdom.³ These statistics highlight the critical need for timely and effective interventions to improve patient outcomes.

Modern hip fracture management now relies on coordinated efforts from various healthcare professionals. Early involvement of doctors, including geriatricians and anesthetists, ensures thorough preoperative assessment. Physiotherapists and occupational therapists are vital for enhancing outcomes in early mobilization. Pharmacists manage polypharmacy and optimize osteoporosis treatment while nursing staff provide continuous care. In Western healthcare, social services and family support are key for effective post-discharge care. Communication among all stakeholders is crucial for patient-centered care. Centralized hip fracture wards with standardized protocols have better outcomes than fragmented care models.⁴ A key change in hip fracture management is the emphasis on early surgery, ideally within 36 hours of admission, which has been shown to decrease mortality and improve functional outcomes. Delays should be avoided, even for chronic conditions that cannot be immediately addressed. Enhancing hydration and resuscitation before surgery improves readiness and prognosis. Additionally, early, full-weight-bearing mobilization after surgery is now encouraged to reduce complications like deep vein thrombosis and pneumonia. Tailored anesthesia approaches, particularly regional techniques like fascia iliaca blocks, are effective in reducing opioid use and lowering the risk of postoperative delirium in elderly patients. Hip fractures, often due to osteoporosis, provide a chance to start long-term treatment to prevent future fractures. Every patient with a neck or femur fracture should be evaluated for osteoporosis and prescribed appropriate medications such as bisphosphonates. Fracture liaison services can help ensure adherence to treatment guidelines.

Government policies and healthcare directives are vital in hip fracture management, as early surgery and multidisciplinary care can improve clinical outcomes and efficiency. Studies like the HIP ATTACK trial offer valuable insights for refining treatment protocols. While developed healthcare systems effectively implement these approaches, developing countries face challenges like limited resources and workforce shortages. Nevertheless, the gradual incorporation of principles such as early surgery, dedicated orthopedic wards, and multidisciplinary teams can lead to significant improvements. Collaboration between local and international institutions is essential for knowledge exchange and training to enhance care in these regions. Government support is crucial for policy changes and funding to promote early mobilization and osteoporosis management. By combining global best practices with adaptable local strategies, developing healthcare systems can significantly improve hip fracture outcomes and overall quality of life for aging populations. The management of hip fractures has transitioned from being mainly a surgical issue to a comprehensive, multidisciplinary challenge

that necessitates the coordinated efforts of various healthcare professionals. As the global population ages, adopting and enhancing these strategies is essential to ensure that hip fracture care meets the complex needs of elderly patients. The future of hip fracture management will be defined by collaboration, innovation, and a focus on patient-centered care.

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