

Consequences of Orthopedic Fragility Fracture Related to Osteoporosis

Robert Guldberg*

Department of Orthopedic Surgery, University of California, San Francisco, California, USA

DESCRIPTION

Osteoporosis is a common skeletal disorder characterized by reduced bone density and increased bone fragility, which significantly increases the risk of fragility fractures. Among these fractures, orthopedic fragility fractures are of particular concern due to their profound consequences on an individual's health and quality of life. This article explores the various consequences of orthopedic fragility fractures related to osteoporosis, exposing the physical, psychological, and economic implications.

Physical consequences

Orthopedic fragility fractures, often occurring in the hip, spine, and wrist, can lead to a range of debilitating physical consequences. Hip fractures, in particular, are associated with severe mobility issues, pain, and functional limitations. These fractures require immediate surgical intervention and have a substantial impact on an individual's ability to perform activities of daily living. This can result in a loss of independence and a reduced quality of life.

Spinal fractures, on the other hand, can lead to a stooped posture and a decrease in height, causing chronic back pain and physical deformity. The loss of vertebral height can also lead to a reduced lung capacity, potentially increasing the risk of respiratory issues. Spinal fractures often go undiagnosed or untreated, leading to chronic pain and further complications.

Wrist fractures may seem less severe, but they can still have significant physical consequences, affecting one's ability to perform fine motor tasks and participate in activities that require wrist mobility. Collectively, these physical consequences can lead to a vicious cycle of inactivity, muscle weakness, and increased fall risk, exacerbating the effects of osteoporosis.

Psychological consequences

In addition to the physical consequences, orthopedic fragility fractures related to osteoporosis can have profound psychological effects. The sudden loss of independence and functional ability often results in anxiety and depression. Individuals may become socially isolated due to their reduced mobility and the fear of

falling, leading to feelings of loneliness and decreased overall well-being.

The visible physical deformities resulting from spinal fractures can also lead to a negative body image, which further contributes to psychological distress. The pain associated with these fractures can lead to chronic discomfort and the constant reminder of one's physical limitations, affecting mental health.

Fear of future fractures, often referred to as "the second fracture," is another psychological consequence. Individuals who have experienced an orthopedic fragility fracture are at significantly higher risk of subsequent fractures. This fear can lead to a constant state of anxiety and stress, further affecting their overall quality of life.

Economic consequences

Orthopedic fragility fractures related to osteoporosis also have substantial economic consequences. The direct medical costs associated with treating these fractures, including surgical interventions, hospital stays, and rehabilitation, are substantial. In addition, individuals with osteoporosis may require ongoing medical management and prescription medications to slow down the progression of the disease and prevent future fractures, adding to the economic burden.

Indirect costs are equally significant. The loss of independence and ability to work or perform daily tasks can lead to a loss of income and increased reliance on social welfare programs. Family members may also face economic consequences as they take on caregiving roles, potentially leading to reduced work hours or early retirement. Furthermore, the psychological distress experienced by individuals with orthopedic fragility fractures can lead to increased healthcare utilization for mental health issues, further adding to the economic burden.

Prevention and management

Given the far-reaching consequences of orthopedic fragility fractures related to osteoporosis, prevention and effective management are of paramount importance. This includes strategies such as:

Correspondence to: Robert Guldberg, Department of Orthopedic Surgery, University of California, San Francisco, California, USA, E-mail: robertguldberg89@gmail.com

Received: 30-Sep-2023; Manuscript No. BMRJ-23-27878; **Editor assigned:** 03-Oct-2023; PreQC. No. BMRJ-23-27878 (PQ); **Reviewed:** 17-Oct-2023; QC. No. BMRJ-23-27878; **Revised:** 24-Oct-2023; Manuscript No. BMRJ-23-27878 (R); **Published:** 31-Oct-2023, DOI: 10.35248/2572-4916.23.11.250.

Citation: Guldberg R (2023) Consequences of Orthopedic Fragility Fracture Related to Osteoporosis. J Bone Res. 11:250.

Copyright: © 2023 Guldberg R. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Lifestyle modifications: Encouraging a balanced diet rich in calcium and vitamin D, regular weight-bearing exercises, and the avoidance of smoking and excessive alcohol consumption.

Medications: Pharmacological interventions like bisphosphonates, denosumab, and teriparatide can help slow bone loss and reduce fracture risk.

Fall prevention: Implementing measures to reduce the risk of falls, such as removing hazards in the home, improving lighting, and using assistive devices.

Regular screening: Routine bone density measurements, typically through Dual-energy X-ray Absorptiometry (DXA) scans, can identify individuals at risk and guide treatment decisions.

Rehabilitation and support: For individuals who have experienced fractures, rehabilitation and support services can help restore physical function and improve overall quality of life.

Orthopedic fragility fractures related to osteoporosis have far-reaching consequences, affecting individuals physically, psychologically, and economically. The immediate physical impact of these fractures can lead to a loss of independence and a reduced quality of life. Furthermore, the psychological distress and economic burden associated with these fractures can be long-lasting and profound.

Prevention and management strategies are crucial to mitigate the consequences of osteoporotic fragility fractures. Encouraging a healthy lifestyle, using appropriate medications, and implementing fall prevention measures can help reduce the risk of fractures. Timely diagnosis and intervention are essential to ensure individuals receive the support and care they need to regain physical function and maintain their mental well-being, ultimately improving their overall quality of life.