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Spinal pain and its impact on older people

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A B S T R A C T

The term 'spinal pain' collectively includes the cervical, thoracic and lumbosacral regions of the spine. The majority of older people experience spinal pain, and with an increasing proportion of older people, the prevalence of spinal conditions are expected to increase in the coming decades. Musculoskeletal conditions of the spine in the older patient commonly include osteoarthritis and spinal stenosis, and the result of these degenerative diseases includes pain, stiffness and a decreased ability to engage in everyday activities. More than just the burden of pain, spinal pain has a significant considerable impact on the wellbeing and independence of older people within the community. Spinal pain is poorly managed, and knowledge of safe and effective treatment strategies are lacking because of the exclusion of older people in clinical research. Spinal pain in older people is a global health problem; the physical and personal impact of spinal directly threatens efforts to support healthy ageing.

Introduction

Age is a common risk factor for all musculoskeletal conditions. Of particular importance are conditions of the spine, namely the cervical, thoracic and lumbosacral regions. With an increasing proportion of older people globally, the prevalence of spinal conditions are expected to increase in the coming decades, becoming a major global health problem. The general belief was that spinal pain is

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Practice points

- Spinal pain is common and more debilitating in older people, compared to younger adults.
- Contrary to common belief, spinal pain in older people is rarely caused by specific pathology.
- The impact of spinal pain in the older patient include impaired mobility and decreased social participation for the majority of patients.
- Older patients with spinal pain are more likely to present with comorbidities, cardiovascular diseases being the most common, affecting the choice of and response of treatments.

Research agenda

- Older people are largely under-represented in clinical research of low back pain, contributing to poor health care management.
- There is paucity of evidence on the risk factors and course of low back pain in the older patient, and we urgently need high-quality research to guide more efficient, cost-effective, and patient-centred health care of spinal pain in older people.

more common in older age because of pathophysiological changes such as tissue degeneration, muscle weakness and the decline of physical capacity. Recent systematic reviews [1,2] however, have challenged that view and shown that the prevalence of non-specific spinal pain in later years is no more common when compared to the middle-aged population. What is of interest is that when older people experience spinal pain, it is more severe, is more disabling and has a substantial impact on personal wellbeing. Spinal pain in older people is an under-researched area and, as such, older people with spinal pain are poorly managed. Comorbid conditions such as cardiovascular disease, diabetes and depression exist in association with spinal pain, and the management of the older patient is complex.

This chapter outlines common causes of spinal pain and reports the prevalence of regional and multi-site spinal pain in older people. This chapter also shares the findings of large-scale epidemiological data such as the Back Complaints in the Elders (BACE) international consortium [3] and the Back pain Outcomes using Longitudinal Data (BOLD) studies. The impact of spinal pain is then discussed in terms of pain and disability, comorbidities, including sleep disturbances, personal burden, and health care management.

Methods

This is a narrative review of relevant peer-reviewed and grey literature. Search terms used were those relevant to spinal pain (neck pain, thoracic pain, low back pain, spinal pain), impact (disability, quality of life, comorbidity, depression, independence) and ageing (age, older people, elderly). Physiological (osteoarthritis, rheumatologic, spinal stenosis, pathology) and epidemiological (prevalence, risk factors, course) search terms were also used to identify literature of importance. Upon full text retrieval, the bibliographies of publications were searched and literature further retrieved. Both authors contributed to the writing of the manuscript, which followed a structured approach to synthesising the literature and writing the review.

Causes of spinal pain in the older patient

Osteoarthritis of the spine and degenerative joint disease

Osteoarthritis (OA) of the spine involves the degeneration of the paired diarthrodial joints in the posterior aspect of the vertebral column, known as the synovial facet joints [4]. Together with the

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