

The Challenges of Relieving Cancer Pain:

A literature review

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Introduction

The management of pain has long challenged both oncologists and physicians in general. Pain relief is widely regarded as a priority of oncological care, not only due to its ongoing frequency but also to the detriment it causes to patients' quality of life and the tendency towards under-treatment of cancer pain, especially in the palliative setting. 30%–85% of cancer patients experiencing pain during the course of the illness, with up to 78% experiencing severe pain.

In juxtaposition to the morbidity of cancer pain is the substantial evidence that pain is not managed optimally despite increasing effective therapeutic options. This appears to result not only from the predominant reliance on and limitations of biomedical treatment, but also from attitudes of health professionals and patients towards pain management. The complex and multi-faceted nature of oncological pain, which may result from the disease, its complications or the treatment itself, necessitates innovation and increased understanding in our approach to treating it.

This study aims to explore the discrepancy between the increasing array of treatments for cancer pain, as well as the evidence that it can be managed effectively in the majority of cases, and its persisting prevalence.

Methods

A systematic review of the literature was performed using the PubMed database to identify methods to address the barriers preventing optimal treatment of oncological pain:

{{pain management} AND (cancer) AND (palliative)}

Limiting the PubMed search to English language, humans and systematic reviews resulted in the identification of 102 relevant papers. After reviewing the content of each article, 34 were included.

Results

National surveys have identified that cancer pain is prevalent and undertreated. They consistently highlight the devastating psychological and social consequences of ongoing pain. The economic cost of such pain is likewise considerable. Recent reviews suggest that 30%–40% of patients do not receive care based on evidence.

This review identified several barriers to optimal pain management including the ongoing predominance of pharmacological treatment of cancer pain and the number of patients with intolerable adverse effects or pain refractory to medication, as well as nihilistic physician attitudes and insufficient use and awareness of alternative analgesic interventions.

Growing evidence supports the significant potential role for specialist nurses and pain education within a multi-disciplinary approach, and the need to evaluate more conclusively non-pharmacological therapies such as Transcutaneous Electric Nerve Stimulation (TENS).

Discussion

Despite the prevalence of cancer pain and widely available evidence, patients often do not receive optimal care.

The impact of this on patient quality-of-life cannot be underestimated. Continuing professional development and clarification of guidelines addressing cancer pain management will be crucial in addressing this discrepancy.

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Predominance of Pharmacological Management

Pharmacological treatment has remained the mainstay of treating cancer pain throughout the advent of numerous novel and effective alternative therapies. Despite its irrefutable role in cancer pain, several studies demonstrate its limitations, such as adverse effects preventing sufficient relief and those with pain refractory to medication.

Alternative or complementary and non-pharmacological therapies such as TENS may have the potential to address pain in such patients but as yet systematic reviews of its use in these circumstances have proven inconclusive due to a lack of suitable RCTs.

Specific Interventional Techniques

Several studies have provided robust evidence for interventional pain-management techniques as alternatives to pharmacotherapy. Appropriate use of, for example, intra-thecal medication administration, cervical cordotomy, vertebroplasty and coeliac plexus or splanchnic nerve block. Not only do these methods provide relief in refractory pain, but in contrast to their place as a fourth step of the World Health Organization's pain treatment ladder, the literature is suggestive of their benefit earlier in the development of pain, allowing reduction in analgesics and improved quality of life.

Physician and Patient Challenges

Reviews aiming to determine the effectiveness of interventions targeting behavior and facilitating knowledge for health practitioners and patients have shown dramatic improvements in areas such as cancer pain management where best practice is not well-defined. In addition, consistently poor prescribing and incorrect beliefs of both doctors and patients regarding safety, efficacy and addictive risk relating to opiates has been noted in palliative and oncological pain settings.

Multi-disciplinary Approach

Evidence-based medicine is well-established as a practice that benefits from multi-disciplinary input, but increasing research supports the role of comprehensive education, social support and specialist oncology nurses in both primary and secondary care settings.