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Research Article

ELECTRIC HOT AIR POUCH ON PAIN

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ABSTRACT

Surveys undertaken in various developed and developing countries have shown that musculoskeletal pain is a major health problem. Knee and low back pain is considered to be the highest prevailing factor for musculoskeletal pain. Musculoskeletal problems at present are seen as the most common cause of severe pain and disability. Approximately 2 million people across the world suffer from musculoskeletal pain each year. The use of thermotherapies (heat therapies) for musculoskeletal pain has been in existence from the days of ancient Greek and Egyptians. There have been various studies describing the prevalence rates of musculoskeletal pain among various strata of people, but limited study are in existence which supports the use of alternative therapies other than pharmacological treatment in reduction of musculoskeletal pain.

Literature search from the previous existence studies were analysed, key words and specific search terms in relation to the study was searched. Few of the terms were "hot water bag application", "heat application", "thermotherapies", "cryotherapy" was searched. The search was done in the following database like PubMed, ProQuest, Google Scholar and Copernicus. A man cannot function to his fullest when in pain. Thus at most care needs to be taken to relieve each human being in pain. This area of research needs more of research to be taken as this poses a very huge impact on the society.

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INTRODUCTION

According to World Health Organization (WHO) 40% of people above the age of 60 years suffer from musculoskeletal disorder related pain and about 80% of the people have low back pain at some point in their life.¹ According to the international classification of diseases, more than 150 diagnoses broadly are put into musculoskeletal conditions on a whole. It is often assumed that the prevalence of musculoskeletal disorders increases with age, it is to be kept in mind that most of the younger generation are also affected, often during their peak earning years. Study on global ageing and adult health (SAGE) highlights the huge prevalence of arthritis in developing countries especially those in a lower socioeconomic group.^(2,3) The burden in musculoskeletal diseases is an important indicator of quality of pain.⁴ This review subsequently focuses on the prevalence of musculoskeletal pain in the general population.

Prevalence of Musculoskeletal pain

Musculoskeletal disorders can be broadly called as the group of conditions that affect the musculoskeletal system and it's majorly associated with pain and impaired physical condition. One of the most important causes of long term pain

and physical disability is musculoskeletal disorders. The mental and social health of general population is greatly affected by the physical disability and pain, thus affecting the patient's quality of life. But till today there has been very little action taken for the prevention and management of musculoskeletal conditions and pains experienced by it. Based on duration of pain, musculoskeletal pain can be divided into three main categories. The acute pain lasts less than four weeks, sub-acute type for four to eight weeks, and chronic type for more than eight weeks.^(5,6)

Mechanism of heat Application

Heat application is an adjuvant to pharmacological treatment. It is less expensive when compared to high cost pharmacological treatment. Heat application is broadly used in many generalized pain like that of knee pain, low back aches etc. The mechanism of heat application works by preventing the perception of pain by decreasing the conduction time of the sensory nociceptors in the brain. Heat application causes vasodilatation and the heat applied penetrates deeper into the muscle and hence reduces the muscle spasm and pain. Previous study conducted on this area revealed that 20-30 minutes of topical heat application onto the skin has significantly reduced pain to a great extent.^(7,8)

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CONCLUSION

To conclude thermotherapy caused low back pain to be relieved. Since these methods predictably have fewer side-effects and are economical and accessible, they could be used, alongside pharmacologic treatments, as supplementary ones for reducing pain in the patients with low back pain.

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