

health

technology

assessment



EXECUTIVE SUMMARY

HEAT TREATMENT FOR DEGENERATIVE CHANGES IN SKELETAL SYSTEM

HEALTH TECHNOLOGY ASSESSMENT UNIT
MEDICAL DEVELOPMENT DIVISION
MINISTRY OF HEALTH
MOH/PAK/58.03(TR)

EXECUTIVE SUMMARY

INTRODUCTION

Osteoarthritis and degenerative musculo-skeletal disease are among the most common diseases encountered in clinical practice. Rheumatoid arthritis and its variants is similarly a common disease affecting a large population. These conditions cause pain and disability especially among the elderly. Pain relief is the most important goal of therapy. Pharmaco-therapy is not without its difficulties or adverse effects in the elderly population. Therefore non-pharmacologic treatment like heat or cold therapy and physical exercise are frequently being used. Heat is used either as the primary therapy or adjunct therapy to prevent or minimize the consequences of inflammation in the above conditions. The heat therapy modalities that are currently available in clinical practice are: hot packs, infrared, wax bath, ultrasound, short wave diathermy, microwave, laser, corona discharge (*sonotron*) and capsaicin.

OBJECTIVE

The objective of this assessment is to determine the safety, effectiveness and cost implications of heat treatment for degenerative changes of skeletal system.

RESULTS

There is insufficient evidence to support the effectiveness and safety of microwave therapy, short wave diathermy, interferential therapy, infrared therapy, and hot-packs therapy for the treatment of musculo-skeletal degenerative disease. In addition, there is inconclusive evidence to support the effectiveness of ultrasound, wax bath, laser, and corona discharge (Sonotron) for the treatment for musculo-skeletal degenerative disease. However, Capsaicin has been found to be safe and useful for treating osteoarthritis, but there is insufficient evidence of its effectiveness in treating rheumatoid arthritis. In a survey of the local situation, it was found that there is variation in selection of the modality of treatment by surgeons and physiotherapists for some common conditions including musculo-skeletal degenerative disease.

RECOMMENDATION

There is a need for greater standardization of treatment for common conditions requiring heat treatment. More studies need to be carried out at the local level to examine the effectiveness of some of these modalities.