The Clinical Trial on Comparing Three Types of Cryotherapy in the Management of Post-total Knee Replacement Patients

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Introduction
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Cryotherapy is commonly used on patient after Total Knee Replacement surgery. It helps to minimize haemarthrosis and swelling. The types of cryotherapy include Ice Pack, Cryocuff; and Game Ready®. However, there is no local study to compare the effectiveness of these modalities. Therefore, this study aims to evaluate the effectiveness of three kinds of cryotherapy for patient undergone the Total Knee Replacement.

Objectives
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(1) To evaluate the knee circumference by 3 kinds of cryotherapy
(2) To evaluate the range of motion (ROM) by 3 kinds of cryotherapy
(3) To evaluate the pain level by 3 kinds of cryotherapy
(4) To evaluate the muscle strength by 3 kinds of cryotherapy
(5) To compare the effectiveness of using Game Ready®, Ice Pack and Cryocuff

Methodology
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A pre-test and post-test design was used. Sixty subjects with stable condition after total knee replacement surgery were recruited. They were divided into three groups, and each group received one type of cryotherapy. The outcome measures were knee circumference, knee ROM, pain level and muscle strength.
Result
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Ice Pack showed significant improvement on knee ROM, reduction of knee circumference and pain level (p