

COMPARATIVE STUDY OF TWO UNLOADING BRACES FOR UNICOMPARTMENTAL KNEE OSTEOARTHRITIS: ARE THEY DIFFERENT?

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Objectives

Knee osteoarthritis ranks among the top contributors to global disability. Research has indicated that unloading knee braces can offer effective short-term pain relief for certain individuals diagnosed with Unicompartamental osteoarthritis (UOA). The primary objective of these assistive devices is to diminish pain, enhance physical function, and potentially decelerate the progression of the disease. The objective of this pragmatic study was to compare patient satisfaction outcomes of the two braces.



Knee OA without bracing
(bone-on-bone contact)



The 3-Point Leverage System
(Unloader One X shown)



Knee OA with bracing
(space created between bones)

THE BIOMECHANICAL CHANGE IN THE KNEE IS DEMONSTRATED BY THE X-RAYS ABOVE



THUASNE UNIRELIEVER® OSSUR UNLOADER®

Methods

We enrolled a total of 28 patients aged between 45 and 70, all of whom had radiographically confirmed Unicompartamental knee arthritis. There were 10 female and 18 male patients. 78% had medial knee OA. The braces compared were Ossur Unloader® and Thuasne UniReliever®. Baseline Oxford Knee scores and Lysholm scores were collected. Patients were fitted with one of the braces by a nurse experienced in brace application. It was not possible to blind the patients to the type of the brace. The patients wore each brace for 1 hour. Subsequently pre and post-brace pain scores were collected and feedback forms regarding comfort, appearance, pain relief and ease of application completed.

Results

86% of patients chose the Thuasne UniReliever® brace as compared to the Ossur Unloader brace®.

Both braces gave a similar type of pain relief which was immediate in 45% of patients. The mean pre-brace Oxford Knee Score increased from 15.22 to a mean post-brace score of 21.89. Similarly, the mean pre-brace Lysholm Score rose from 28.67 to a mean post-brace score of 55.89. The costs of the braces have not been factored in for the purpose of this study.

Conclusion

The study's findings indicate that in comparison, although both braces provide equal pain relief, the Thuasne UniReliever® brace has better patient acceptance. A further study with prolonged use of the brace will be helpful.

References:

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