OSTEOARTHRITIS PAIN RELIEF STUDY

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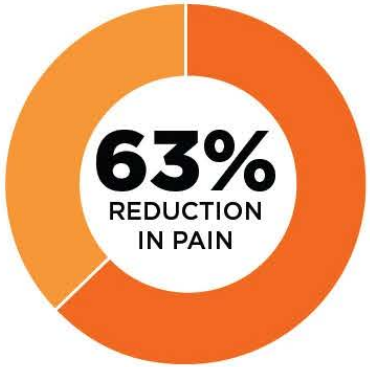
A total of 46 participants with OA of the knee wore the Incrediwear Knee Sleeve for 6 months. None of them received any type additional physical or injection therapy. Patients were evaluated at baseline, and every month after that until the conclusion of the 6 month study period.

The study findings were statistically significant and indicated the Incrediwear Knee Sleeve was responsible for an improvement in pain and function for grades 1 and 2 osteoarthritis, providing an non-surgical treatment option for patients.

WEARABLE
ANTI-INFLAMMATORY



STATISTICALLY SIGNIFICANT
STUDY FINDINGS

The average reduction in pain was 63%, and 100% of study participants with grade 1 and 2 osteoarthritis experienced some level of relief after using the Incrediwear Knee Sleeve.

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OSTEOARTHRITIS PAIN RELIEF

USE OF THE INCREDIWEAR KNEE SLEEVE RESULTED IN 63% OKC AND 51% VAS

RESULTS PUBLISHED IN THE OCTOBER 2019 ORTHOPAEDIC JOURNAL OF SPORTS MEDICINE

STUDY METHODS: This study was undertaken at a hospital in the United Kingdom. Patients who had radiographic features of OA, experienced knee pain for at least 6 months, and opted for nonsurgical intervention were included. Patients were recruited over 3 months. The University of California, Los Angeles activity score, Lysholm score, visual analog scale (VAS) score, and Oxford Knee Score (OKS) were collected at monthly intervals for 6 months. Patients were followed to determine their compliance with wearing the knee sleeves at all times, as advised, and whether any adverse effects had occurred.

RESULTS: A total of 50 participants were recruited for the study; 4 participants were excluded due to pain and were converted to surgical management. Therefore, 46 patients were analyzed and placed into 2 groups according to severity of OA, as classified by the Kellgren-Lawrence system: group A had grade 1 or 2 OA, and group B had grade 3 or 4 OA. There were 25 patients in group A and 21 in group B. Improvements were seen in OKS, VAS, and Lysholm scores in both groups. Clinically significant improvements were seen in group A only for OKS (mean increase, 14), VAS (mean decrease, 4.1), and Lysholm (mean increase, 17.2) scores. These results were also statistically significant (OKS, P = 5.8 × 10-7; VAS, P = 7.7 × 10-12; Lysholm, P = 4.2 × 10-11). The data from this study demonstrated that GE knee sleeves gave better outcomes for patients with grades 1 and 2 OA compared with patients with more advanced disease, which is consistent with previous studies. A total of 3 patients reported skin irritation, which resolved with simple skin ointment application. No patients reported infection, deep vein thrombosis, or circulation problems.

CONCLUSION: GE knee sleeves could play an important role in optimizing nonsurgical management of patients with knee OA, especially patients with grades 1 and 2 OA, as demonstrated by the clinically significant improvements. 100% of participants saw a reduction in pain, with VAS score 51%, and 63% OKC.

ABOUT THE SLEEVE: The Incrediwear Cred40 knee sleeve is embedded with carbonized charcoal and germanium. Germanium is a nontoxic semiconductor metalloid located between tin and silicone in the periodic table. Since its discovery in 1886, germanium has been widely used in electronics and optics.28 Semiconductors such as germanium differ from metals in that as the temperature of semiconductors increases, their resistance decreases. This is a result of germanium having more “free” electrons at certain temperatures, allowing for a higher conductivity. It is theorized that embedding germanium into cotton garments is an effective way to use the transdermal effect to create a micro electromagnetic field, leading to increased circulation and affecting the inflammatory process.20 Previous low-level observational studies have suggested that germanium-infused garments may provide improved clinical outcomes in osteoarthritis. Germanium-embedded (GE) knee sleeves embrace this fabric technology.

Incrediwear manufactures wearable anti-inflammatory braces, sleeves, and apparel for reducing pain and accelerating recovery.

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