

# **i**NCREDIWEAR<sup>®</sup>

## **Proven Pain Relief for Osteoarthritis Sufferers**



### **Background**

Knee osteoarthritis (OA) affects an estimated 1 in 5 individuals older than 45 years of age in the United Kingdom. Previous studies have suggested that germanium-infused garments may provide improved clinical outcomes in OA. Incrediwear<sup>®</sup> germanium embedded (GE) knee sleeves embrace this fabric technology.

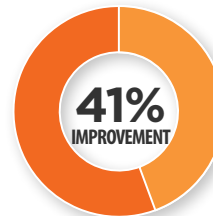
### **Methods**

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 Incrediwear<sup>®</sup> knee sleeves at all times, as advised, and whether any adverse effects had occurred.

### **OSTEOARTHRITIS PAIN RELIEF STUDY**



Oxford Knee Score



Lysholm Score



Visual Analog Scale

### **Key Findings**

- Clinically and statistically significant improvement in OKS, VAS, and Lysholm score for patients with Grades 1 & 2 OA.
- 100% of participants experienced improvement, and a high compliance rate was achieved.
- Clinically significant improvements indicate that Incrediwear knee sleeves should play an important role in optimizing nonsurgical management of patients with Grade 1 & 2 knee OA.

**Effect of Germanium-Embedded Knee Sleeve on Osteoarthritis of the Knee**

Orthopaedic Journal of Sports Medicine, October 2019



# **i**NCREDIWEAR<sup>®</sup>

24 / 7 WEARABLE THERAPY



## 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,  $P = .58 \times 10^{-7}$ ; VAS,  $P = .77 \times 10^{-12}$ ; Lysholm,  $P = .42 \times 10^{-11}$ ).

The data from this study demonstrated that Incrediwear® 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.

### Credit authorship contribution statement

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## Discussion:

Incrediwear® 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.