Hinged Microfracture Awl

ALLIANCE FOR INNOVATIVE MEDICAL TECHNOLOGY / ORTHOPEDICS

Product Description

Microfracture awl that reduces unintended cartilage damage. Hinged handle allows for the physician to more easily deliver the force of the pick into the area of interest rather than laterally.

Technical Readiness Level

TRL 6 (System prototype demonstrated in relevant laboratory environment). Instrument has been designed and built based on cadaver lab feedback, incorporating revised handle and tip design. Additionally, several anatomical model procedures have been performed.

Competitive Advantages + Differentiation

Current microfracture awl products have angled tips but no pivot feature. The device has a shaft that can pivot on the handle. This provides the ability to transmit the force along the spiked tip and minimize lateral movement and skiving, while maintaining a similar depth of penetration. The handle provides greater stability during striking. Additionally, the device is envisioned to have disposable features to ensure optimum and consistent performance.

Intellectual Property Status

Patent Application WO2015179646 A1

SOUTHERN RESEARCH

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THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

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Market Overview

Osteoarthritis affects 13.9% of adult over 25 and 33% over 65. The United States cartilage repair market is growing at an annual rate of 6.8%. Defects in the articular cartilage make up a majority of the total knee arthroscopy market (61%). Arthroscopy procedural techniques include microfracture, arthroscopic debridement, osteochondral grafts (OATS) and autologous chondrocyte implantation (ACI) procedures.

Inventors

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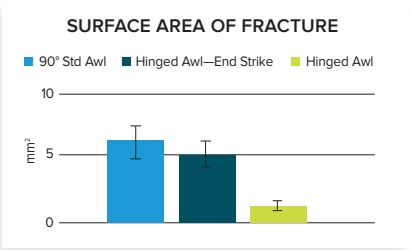

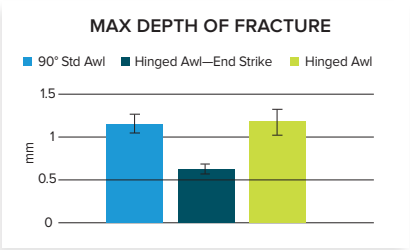

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ABOUT SOUTHERN RESEARCH

Founded in 1941 in Birmingham, Alabama, Southern Research is a scientific and engineering research organization that conducts preclinical drug discovery and development, advanced engineering research in materials, systems development, and energy and environmental technologies research. SR supports clients and partners in the pharmaceutical, biotechnology, defense, aerospace, environmental, and energy industries.

We pursue entrepreneurial and collaborative initiatives to develop and maintain a pipeline of intellectual property and innovative technologies that contribute to the growth of the organization and positively impact real-world problems.

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UAB
THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

ABOUT UAB

Known for its innovative and interdisciplinary approach to education at both the graduate and undergraduate levels, the University of Alabama at Birmingham is an internationally renowned research university and academic medical center, as well as Alabama's largest employer, with some 23,000 employees, and has an annual economic impact exceeding $5 billion on the state. The five pillars of UAB's mission include education, research, patient care, community service and economic development. UAB is a two-time recipient of the prestigious Center for Translational Science Award.

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