



Orthopedic Meniscus Repair Implant, Introducer and Delivery System

Technology ID

20170163

Category

Engineering & Physical
Sciences/Design Specifications
Life Sciences/Human Health
Life Sciences/Medical Devices
Agriculture &
Veterinary/Veterinary Medicine

Repairs Meniscus Tears in the White Zone

A new orthopedic meniscus repair system provides orthopedic surgeons the ability to repair meniscus tears in the white-white space and can repair a variety of tear types (e.g., longitudinal, radial, flap, horizontal, bucket handle and degenerative lesions). The tool allows the surgeon to place suture knots in any area of the implant matrix in the same amount of time as a meniscectomy and could provide alternative to current suture techniques in a technologically complex space. The system, which may be all in one or multi-component, is comprised of three components: an implantable suture knot system, an introducer and a delivery/deployment tool. The technology could be used in any number of soft tissue spaces (e.g., cartilage, collagen, muscle, ligaments, etc.) and could be used in several parts of the body (e.g., ankle, knee, shoulder, etc.).

New Suture, Fixation Methods and Suture Tie System

Current repair techniques focus primarily on tears in the red-red or red-white tissue zone using suture, bioabsorbable sutures or implants, and some newer technologies include stem cell therapy, blood platelet therapy, implants or biological implant scaffolds/matrices. This new design could develop a new type of suture, a new fixation method, a new suture tie system and other novel device- related features. It increases speed and decreases complexity for all surgeons that do meniscus tear work.

BENEFITS AND FEATURES:

- Repairs meniscus tears in the white-white space
- Able to repair a variety of tear types (e.g., longitudinal, radial, flap, horizontal, bucket handle and degenerative lesions)
- Applicable to several areas (e.g., ankle, knee, shoulder, etc.)
- Novel device- related features include a new type of suture, a new fixation method and a new suture tie system

APPLICATIONS:

- Meniscus repair
- Soft tissue repair (e.g., cartilage, collagen, muscle, ligaments, etc.)

Phase of Development - Prototype development

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