Drill Guide System for Suture Anchor Insertion

The innovation offers specially engineered orthopedic drill guides for installation of suture anchors with minimal disruption of surrounding healthy tissue.

What is the Problem?

Suture anchors are critical in attaching soft tissues to boney structures in various joints during orthopedic surgeries. However, the installation process of suture anchors often requires the use of drill guides, which can lead to increased trauma to healthy tissues due to the need to repeatedly replace the guide via the same small portal. This problem is particularly concerning for patients with fragile bones or osteoporosis and can result in extended surgical time and compromised surgical outcomes.

What is the Solution?

The innovative solution is a specially engineered orthopedic drill guide designed to minimize tissue trauma during suture anchor installation. The guide and drill feature a reduced diameter, and the sharp obturator used for insertion is cannulated, allowing it to be placed over a Nitinol flexible guide wire. This technology reduces the disruption of surrounding healthy tissue and offers potential benefits in terms of improved surgical outcomes and decreased surgical time.

What is the Competitive Advantage?

The competitive advantage of this innovative orthopedic drill guide lies in its ability to address the unmet need for a less invasive suture anchor installation process. The reduced diameter of the guide and drill, combined with the cannulated obturator, allows for a less invasive insertion process compared to traditional drill guides. This aspect is particularly important for patient populations prone to fragile bones or osteoporosis, as well as surgeries where reduced surgical time is crucial. By minimizing tissue trauma, it can lead to overall cost savings through improved surgical outcomes and shortened surgical time. Furthermore, the innovation is well-positioned to cater to the growing orthopedic devices market, which is projected to expand due to the increasing prevalence of orthopedic disorders, an aging population, and the rise in road accidents.

Technology ID

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Category

Device/Orthopedics
Hardware/Other
Selection of Available Technologies

Authors

Christopher John Wahl

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