

Regeneten Bioinductive Implant:

One of Dr. Nimit Patel's latest surgeries gave us an up close look at new Smith and Nephew technology used to increase rotator cuff thickness.

(

The Regeneten Bioinductive Implant is a specialized collagen patch. Collagen is a fundamental element, men

This bioabsorbable implant induces the body's natural healing response to support new tendon growth.

This bioabsorbable implant is about the size of a postage stamp and also acts as a physical stabilizer after attachment preventing further deterioration and injury to that area.

For the patient, this means that post-surgical recovery and rehab can be shorter, pain relief comes faster, and there is a reduced risk of re-tears.

Here's how it works:

Biodegradable Scaffold: The Regeneten implant is made of a biodegradable material called poly(L-lactide-co-ε-caprolactone), which gradually breaks down over time within the body. This scaffold is designed to mimic the structure of tendon tissue and provide a supportive framework for new tissue growth.

Bioinductive Properties: The implant is bioinductive, meaning it stimulates the body's own healing response. It does this by releasing growth factors and other signaling molecules that attract cells involved in the repair process, such as fibroblasts and stem cells. These cells migrate to the site of the injury and begin to proliferate and produce new extracellular matrix, which eventually matures into tendon-like tissue.

Placement: The Regeneten implant is typically placed over the site of the partial-thickness rotator cuff tear during arthroscopic surgery. It acts as a bridge over the damaged area, providing mechanical support while promoting tissue healing.

Clinical Efficacy: Clinical studies have shown promising results with the use of Regeneten Bioinductive Implant in the treatment of partial-thickness rotator cuff tears. Research has demonstrated improvements in pain, function, and structural integrity of the repaired tendon over time. However, as with any medical intervention, individual outcomes may vary, and further research is ongoing to optimize patient selection and surgical techniques.

Overall, the Regeneten Bioinductive Implant represents an innovative approach to rotator cuff repair, aiming to harness the body's natural healing processes to promote tissue regeneration and improve clinical outcomes for patients with partial-thickness rotator cuff tears. healing option promotes new tendinous tissue grow

()

<https://www.advancedosm.com/regeneten-bioinductive-implant-orthopaedic-sports-medicine-specialist-cypress-houston-tx/#:~:text=Obtained%20from%20a%20highly%20purified,environment%20favorable%20for%20tendon%20healing.>

<https://www.smith-nephew.com/en/health-care-professionals/products/sports-medicine/regeneten-bioinductive-implant>