

Usage of **SURGICOLL-MESH®**



FOR APPLICATION IN **ORTHOPEDIC SURGERIES**



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Under the technology from:



Fremont, CA, USA

ABOUT SURGICOLL-MESH®

Surgicoll-Mesh, an innovative, high purity Type-I collagen has the following description and unique features:

1. High functional efficiency.
2. Its bioactivity is further enhanced by phosphorylation.
3. High degree of wound healing and tissue regenerative features.
4. Evidenced by equivalent Product approved in the US market.
5. US Patented for its purity and clinical efficacy^{1,2}.
6. Prepared using USP/IP, WHO GMP standards with ISO 13485:2016 regulations for quality compliances.

Indications of Surgicoll-Mesh

- Intra Oral Surgical - Post-operative mucosal defect in oral cancer and pre-cancerous lesions, dental/OMF applications.
- Soft Tissue & Muscle Flap Reinforcement – As a patch used for suture line reinforcement, muscle supplement with sling, repair and anchorage of tendon damage, and Transverse Rectus Abdominis Muscle (TRAM) flap procedures.
- Chronic ulcers and Diabetic ulcer treatment.
- Third-Degree Burn to accommodate the Skin Graft needs
- Orthopedic Surgery - Osteochondral resurfacing, synovial tissue implant, repair of rotator cuff, patellar, Achilles, biceps, quadriceps and other tendons.
- Cartilage Regeneration.
- Pelvic floor reconstruction, sacro-colposuspension and urethral sling.
- Colo-rectal, urethral & vaginal prolapse.
- Hernia repair including abdominal, inguinal, femoral, diaphragmatic, scrotal, umbilical, and incisional hernias.
- Cardio-vascular - Atrial, ventricular and arterial patch repair, suture line buttress, intra-cardiac patch, thoracic wall etc.
- Neurosurgical - As a substitute for dura repair and nerve wrap.

Advantage of using Surgicoll-Mesh:

- **High purity Type-I Collagen:** Surgicoll-Mesh consists of native un-crosslinked pure Type-I collagen (>97% pure) free of immunogenic proteins, lipids, and elastin^{3,4}.
- **Faster Healing:** Collagen phosphorylation attracts cells, regenerates tissue, and stimulates blood capillaries/granulation within 4 to 5 days⁵.
- **Innovative Technology:** Better than intact tissue-based membranes which contain 10 to 51% elastin and other immunogenic molecules.
- **Easy Application:** No washing needed prior to use. Can be Sutured and/or stapled.
- **Pain Control:** Effectively reduces pain
- **Various Sizes:** Choose from our available wide range of standard sizes. For more details, [see Brochure](#).
- **Cost-Effective:** Accelerated wound healing and tissue remodeling with minimal applications.
- **Long Shelf Life:** Remains clinically usable for 3 years when stored in room temperature condition



FOR ORTHOPEDIC SURGERIES

OSTEOCHONDRAL RESURFACING:

SURGICOLL-MESH®

ORTHOPEDIC APPLICATIONS

Knee Joint Cartilage Repair Using a Minimally Invasive Surgery



To treat injuries to bones, cartilage, ligaments, muscles and tendons.



The damaged cartilage parts can be repaired by inserting **Surgicoll-Mesh** or can be removed altogether and replaced with **Surgicoll-Mesh**.

Arthroscopic Meniscus Repair of Knee PreOp URL: <http://www.youtube.com/watch?v=Gc8LtPUQ13E>

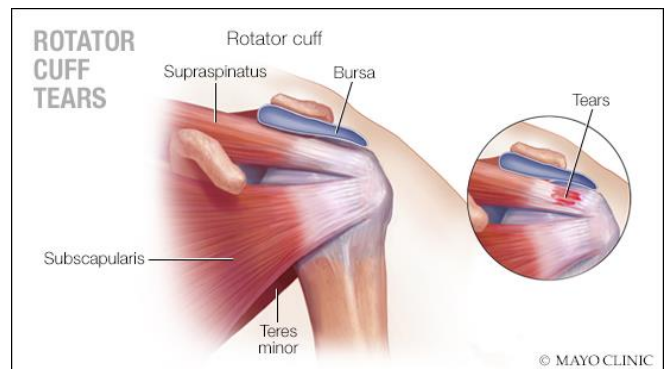
Competing product info URL: <http://www.geistlich-surgery.com/chondro-gide.html>

SYNOVIAL TISSUE IMPLANT:

Surgicoll-Mesh can be effective in reducing inflammation of joints and in promoting repair of synovial membrane and articulating cartilage. It can be used in surgical repair of damaged joints that would cover/replace synovial membrane while also reducing pain. Surgicoll-Mesh may readily conform to the size and structure of the human synovial capsule thereby ensuring appropriate coverage of the damaged synovial membrane. Usage of Surgicoll-Mesh could also eliminate the need for removal/replacement of the joints.

REPAIR OF ROTATOR CUFF TEAR:

Surgicoll-Mesh can be used for the treatment of both partial- and full-thickness rotator cuff tears. In case of partial-thickness tears, the product can be directly applied on the site of injury. However, in the treatment of full-thickness tears, it is advisable to repair the injury as per the Surgeon's preferred method and then apply Surgicoll-Mesh over the repaired site.



The absorbable Surgicoll-Mesh would support the body's natural healing mechanism by facilitating the formation of new tendon-like tissue at the site of rotator cuff tear. As this product gradually degrades over time, a significant increase in the overall thickness of the native tendon can be observed through the induction and remodeling of tendinous tissues.

REPAIR OF EXPOSED BONES & TENDON⁶:

SURGICOLL-MESH[®] equi

EXPOSED BONE & JOINTS IN THE LEG
(Need of a Flap Cover is Circumvented)



Before Surgery



Surgical intervention Day 1
with Surgicoll-Mesh equi



Day 7, a gel like
substance covering
the bare bones



Good graft take &
healing, Day 25

Provides excellent coverage over exposed bone, tendon,
cartilage and joints

Ref: Acta Medica International, 3(1), 146 (2016)

References:

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3. Gunasekaran S KM, Dhanraj P. Bioactive Collagen Dressing for the Treatment of Burns, Donor Sites, and Ulcers. World Biomaterials Congress Meeting. 2008.
4. Dhanraj P GS, DeWeese J, Sutkin H. How Native, Pure Type-I Collagen Dressing Cures Ulcers Better Than Other Comparable Skin Substitutes. Association of Plastic Surgeons of India. 2008.
5. Gunasekaran S KM, Dhanikachalam A, Narayan R. A comparative second-degree burn treatment trial collagen dressing vs. silver sulphadiazine alone. American Society for Dermatological Surgery. 2005.
6. https://www.advanced-biotech.com/img/Comparison_of_type_I_collagen_with_Integra_skin_substitute_2015.pdf

