



ENHANCE POSTOPERATIVE CARE AND **THE PATIENT EXPERIENCE**

Optimize the wound healing environment and patient comfort with Chitogel postoperative sinus dressing.

Medtronic

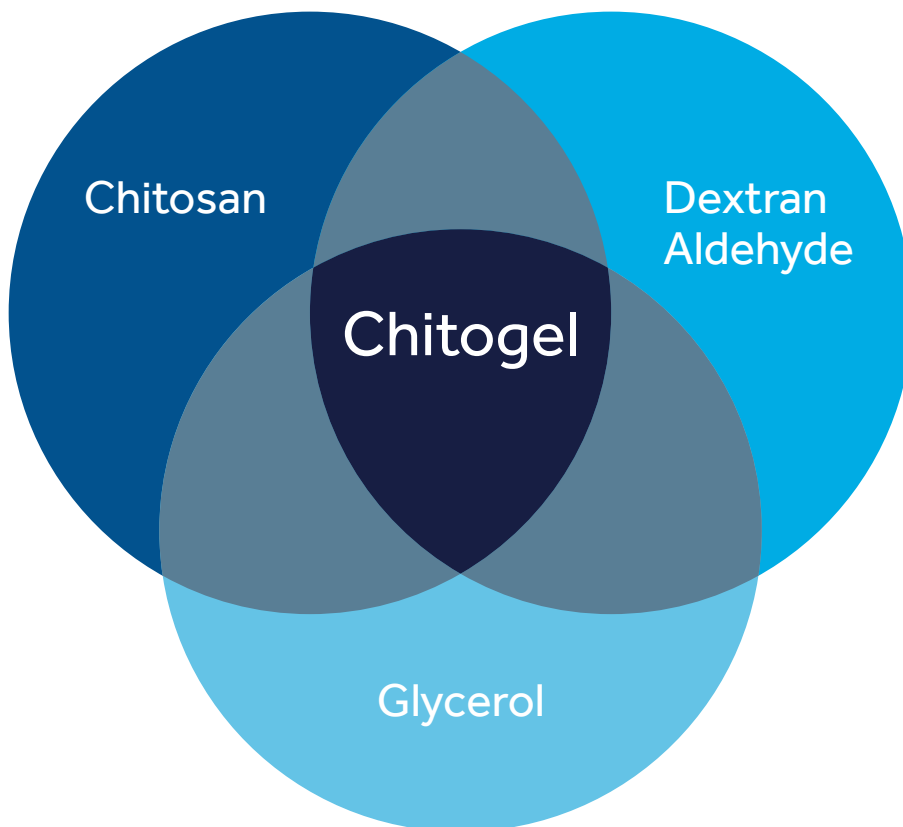
A NATURALLY EFFECTIVE DRESSING FROM A TRUSTED ENT LEADER

Optimizing wound healing after sinus surgery is critical to achieving long-term, positive outcomes. It requires a solution that minimizes adhesions, preserves structural integrity, and addresses patient comfort. Medtronic is meeting these needs with Chitogel — a dissolvable biomaterial made with a unique combination of natural ingredients and clinically proven to enhance wound healing.¹

THREE KEY INGREDIENTS ENHANCE WOUND HEALING

Chitogel supports critical wound healing by combining chitosan, dextran and glycerol — all derived from natural resources.

- Chitosan has anti-adhesion and hemostatic properties.²
- Dextran inhibits coagulation factors and reduces fibroblast migration.^{3,4}
- Glycerol retains moisture and keeps the gel soft.



BACKED BY EXPERIENCE AND EVIDENCE

Chitogel's development is backed by 10 years of research and clinical evidence, 18 published studies and papers, and successful patient outcomes of a diverse range of sinus surgeries.

DEMONSTRATED WOUND-HEALING CHARACTERISTICS*¹:

50% reduction in granulation tissue formation
in edema
in crust formation

47% reduction in adhesions

OSTIAL-AREA IMPROVEMENTS*¹:

73% frontal **35% sphenoid** **34% maxillary**

*At 12 months post-surgery, compared to no packing materials.

AN ADJUNCT TO THE NATURAL HEALING PROCESS

Chitogel's unique characteristics make it an ideal nasal dressing for sinus surgery needs. Use it to:

- Separate tissue or structures compromised by surgical trauma.
- Prevent adhesions between mucosal surfaces in the nasal cavity.
- Minimize ostial stenosis.
- Control minimal bleeding by tamponade effect, blood absorption, and platelet aggregation.
- Enhance wound healing.



EASILY APPLIED, EASY ON YOUR PATIENTS

Unlike other traditional post-surgical products, which can be associated with an unpleasant patient experience, Chitogel is a soft, pliable, viscous gel that is applied with a malleable applicator. It helps minimize bleeding and comfortably coats the affected area. Benefits include:

- Conforms effortlessly to mucosal surfaces.
- Separates tissues in a wide range of sinus anatomies and surgeries.
- Remains in place during the critical healing period.

ORDERING INFORMATION

CSK-4 Chitogel™ Endoscopic Sinus Surgery Kit

TAKING ENT SOLUTIONS FURTHER

Medtronic is committed to improving outcomes for ENT patients by delivering innovative, market-leading products and services. This includes a broad range of tissue health solutions that are safe, effective, and well tolerated. To learn more about Chitogel, contact your Medtronic representative.

References

1. Ha T, Valentine R, et al. The efficacy of a novel budesonide chitosan gel on wound healing following endoscopic sinus surgery. *Int Forum Allergy Rhinol*. 2018 Mar;8(3):435-443.
2. Athanasiadis, T., Beule, et al. Effects of a novel chitosan gel on mucosal wound healing following endoscopic sinus surgery in a sheep model of chronic rhinosinusitis. *Laryngoscope*. 2008 Jun;118(6):1088-94.
3. E. Polifka, Janine & Habermann, Juliane. "Anticoagulants, thrombocyte aggregation inhibitors, fibrinolytics and volume replacement agents." *Drugs During Pregnancy and Lactation: Treatment Options and Risk Assessment: Third Edition*. 2015; 225-249.
4. Paramasivan, S., Jones, et al. The use of chitosan-dextran gel shows anti-inflammatory, antibiofilm, and antiproliferative properties in fibroblast cell culture". *Am J Rhinol Allergy*. 2014 Sep-Oct;28(5):361-5.

Chitogel™ ★

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Rx only. Refer to product instruction manual/package insert for instructions, warnings, precautions and contraindications.

For further information, please call Medtronic ENT at 800.874.5797 or consult Medtronic's website at medtronic.com/ent.