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Case Report Series

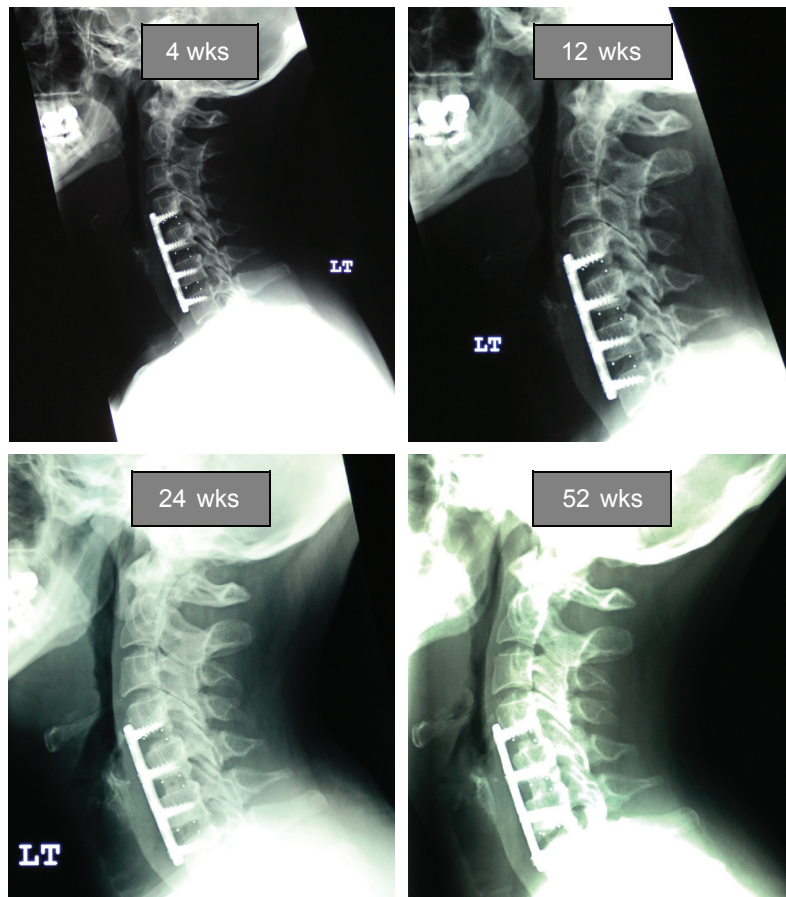
Three-level ACDF Using InQu® Bone Graft Extender and Substitute

Patient

The patient was a 44 year old female presenting with an 8 year history of neck pain increasing in severity and frequency during the recent 6 months, and accompanied by radiculopathy to the left side which had failed conservative treatment. MRI exam confirmed degenerative spondylolisthesis at C4-5 and spondylosis without myelopathy at C5-6 and C6-7.

Procedure

A 3-level anterior cervical discectomy and fusion with cervical plating was performed at C4-5, C5-6 and C6-7. Distraction was placed across each level via insertion of 7mm PEEK interbody cages filled with InQu Granules soaked in patient blood obtained from the operative field.



Prognosis

Cervical x-ray at 4 weeks suggested early consolidation of bone at C5-6, with continued progression at all levels through 52 week follow-up. Solid arthrodesis at C5-6 was observed radiographically at 24 weeks, and the remaining levels demonstrated evidence of solid interbody fusion at 52 weeks in flexion / extension. The patient reported immediate relief of her radiculopathy symptoms, which has been sustained through annual follow-up. The patient remains physically active.

InQu is a biosynthetic polymer that is a hybrid of two interwoven component parts: a natural polysaccharide, hyaluronic acid, and a synthetic polymer, PLGA. This unique hybrid scaffold provides an ideal microenvironment promoting reliable spinal fusion.

InQu Advantage

- Indicated for use as a bone graft extender in spinal procedures.
- InQu has achieved biomechanical and radiographic equivalence to autograft in posterolateral fusion in preclinical studies.
- PLGA and integrated HyA provide a microenvironment that is biocompatible and conducive to new bone formation, which leads to reliable and predictable fusion equivalent to that of autograft.
- The hybrid scaffold supports endochondral ossification as shown in preclinical studies.
- The PLGA component provides compressive resistance to maximize the product's bulking properties.
- The rate of InQu resorption is consistent with the rate of bone remodeling at the site of implantation, resulting in accelerated healing as shown in preclinical studies.
- The unique InQu biomaterial is designed to optimize application and contouring within the anatomy of the spine.
- InQu is radiolucent which allows unobscured radiographic monitoring of the healing process.
- InQu is available in three configurations – *Granules (10cc and 30cc), Matrix (5 x 10 cm), and Paste Mix (2.5cc, 5.0cc, and 10cc)* – to meet your specific procedural needs.



ORDERING INFORMATION:

To order, call Customer Service at 1-888-705-ISTO (4786)

Paste Mix

- 2.5cc PASTE MIX IQSP-PM-102
- 5cc PASTE MIX IQSP-PM-105
- 10cc PASTE MIX IQSP-PM-110

Granules

- 10cc GRANULES IQSP-GR-110
- 30cc GRANULES IQSP-GR-130

Matrix

- 5x10 cm MATRIX IQSP-MX-150



InQu® is a registered trademark of ISTO Technologies, Inc. Patents pending.

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Indication for Use: InQu is a resorbable bone void filler intended to fill bony gaps or voids that are not intrinsic to the stability of the bony structure. InQu is intended for use as a bone graft substitute in the skeletal system (extremities and pelvis), and as a bone graft extender in the spine when combined with bone autograft. These defects may be surgically created or result from traumatic injury to the bone.

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