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Case Report Series

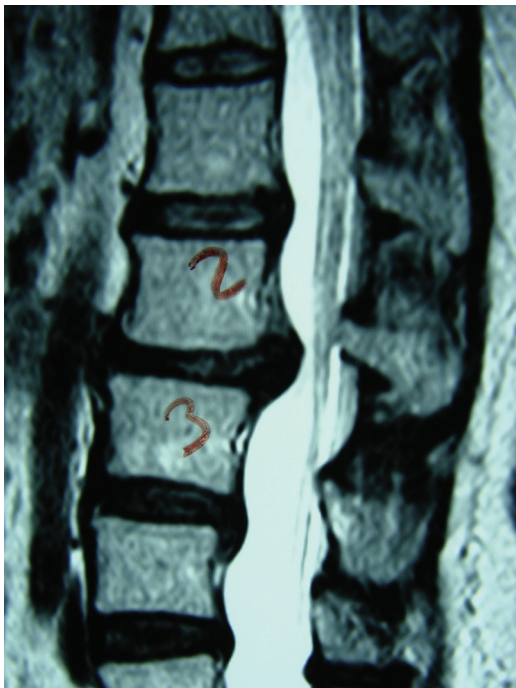
## Sustainable Bone Volume in a Single Level Posterolateral Lumbar Arthrodesis Receiving InQu® Bone Graft Extender

### Patient

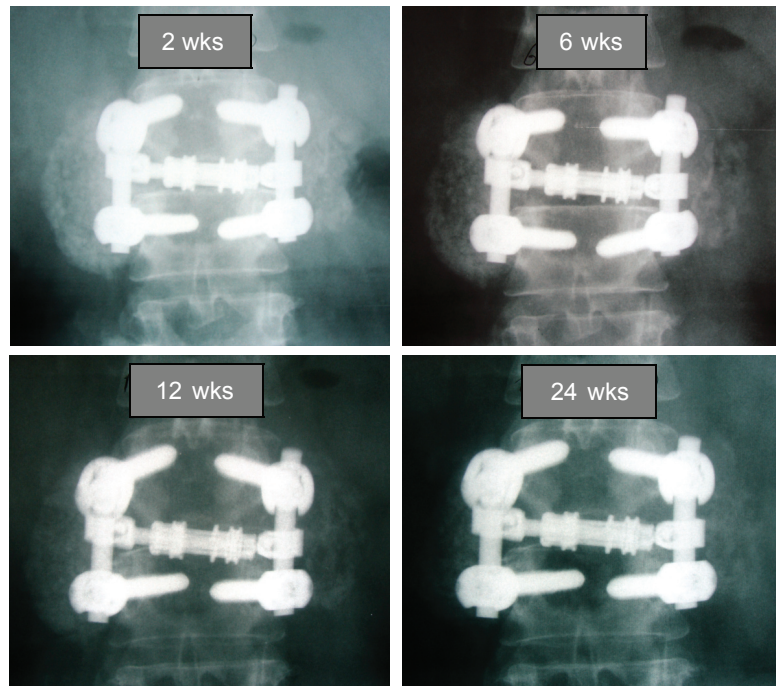
The patient was a 46 year-old female with a 2 year history of progressive back and bilateral leg pain unresponsive to nonoperative treatments, including physical therapy, oral anti-inflammatory medication, oral analgesics, and epidural steroid injections. Marked disc and facet degeneration at L2-3 was observed at MRI.

### Procedure

A decompression with instrumented arthrodesis at L2-3 was preformed in which iliac crest bone graft was placed equally in the lateral gutters bilaterally. Local bone was divided bilaterally and augmented with TCP (10cc) mixed with bone marrow aspirate (BMA - 6cc) on the left, and InQu Paste Mix (10cc) combined with BMA (6cc) on the right.



Preoperative MRI



Left side: TCP with BMA/autograft

Right side: InQu Paste Mix with BMA/autograft

### Prognosis

Progressive radiographic films taken 2 to 24 weeks postoperatively demonstrated rapid coalescence and consolidation of bone graft for the treatment on the right (InQu Extender). The patient experienced rapid relief of back and leg pain and was judged to be well fused 12 weeks postop, returning to full unrestricted activity at that time.

Note apparent resorption of TCP extender on left side at 24 weeks and sustained bone volume extending into the posterolateral gutter on the right (InQu Extender).

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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