

NOVABONE[®]

BIOACTIVE SYNTHETIC GRAFT

Build Strong Bone Fast



MTF Musculoskeletal
Transplant
Foundation

THE ALLOGRAFT LEADERSM

NOVABONE[®] from syringe

BIOACTIVE SYNTHETIC GRAFT

PUTTY

excellent handling characteristics

- Osteostimulative^{4,5}
- Injectable into surgical site
- Stays at the surgical site, will not migrate during irrigation
- Highly malleable, easy to mold and pack into any defect
- Ready to use out of the package



directly to surgical site

MORSELS

excellent hydrophilic properties

- Osteostimulative^{4,5}
- Excellent hydrophilic properties (readily attracts and absorbs blood, etc.)
- Matrix of interconnected pores allows for accelerated bone formation
- Attractive alternative to autograft and allograft
- Porosity mimics the structure of human cancellous bone



SPINE FUSION

SUBJECT:
50 year old; female

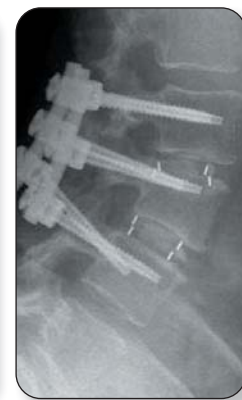
DIAGNOSIS:
Degenerative disc disease at L2-3 & L3-4 with mild disc space collapse at L3-4. There was also evidence of right L3-4 foraminal narrowing.

TREATMENT:
Procedure performed was a L2-3 and L3-4 posterior lumbar interbody fusion with Peek cages and pedicle screws. The cages were packed with NovaBone. NovaBone was also placed in the disc space between and ventral to the cages. The facet joints were packed with NovaBone after they were decorticated.

RESULTS:
The three-month flexion extension lumbar plain X-ray demonstrated no motion and evidence of bone in the disc interspace. A three-month CT SCAN demonstrated bone in the disc interspaces within and between the cages.



Pre-Operative Sagittal MRI SCAN



Post-Operative Flexion Extension Lumbar X-ray, Three Months



Post-Operative Sagittal CT Scan, Three Months

FRACTURE REPAIR

SUBJECT:
42 year old; male

DIAGNOSIS:
Traumatic midshaft fracture of the left humerus following automobile accident.

TREATMENT:
Debridement and stabilization of the defect with a five-pin external fixator. The defect was grafted with 5ccs of NovaBone

RESULTS:
At four weeks, the graft area appears as a slightly radiodense area midshaft around the central pins. By six months, the fracture has healed and the fixator has been removed.



Pre-operative



4 weeks post-operative



6 months post-operative

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THE SCIENCE OF NOVABONE

NovaBone has been the subject of more than thirty basic science, in vivo, and human studies. It has been favorably compared to multiple alternative materials on the market today. NovaBone has a 15-year track record of safety and efficacy in a wide range of clinical applications. Additionally, NovaBone has demonstrated equivalent rates of bone growth when compared to autogenous bone graft.

References

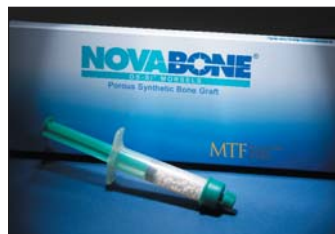
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2. Wheeler DL, Stokes KE, Hoellrich RG, Chamberland DL, McLoughlin SW. Effect of Bioactive Glass Particle Size on Osseous Regeneration of Cancellous Defects. J Biomed Mater Res. 1998;41:527-533.
3. Brice Ilharreborde, MD, Etienne Morel, MD, Franck Fitoussi, MD, Ana Presedo, MD, Philippe Souchet, MD, Georges-François Penneçot, MD, and Keyvan Madza, MD. Bioactive Glass as a Bone Substitute for Spinal Fusion in Adolescent Idiopathic Scoliosis. J Pediatr Orthop. 2008; 28: 347-351.
4. Larry L. Hench, Julia M. Polak. A Genetic Basis for Design of Biomaterials for In Situ Tissue Regeneration. Key Engineering Materials 2008; 377: 151-166.
5. Larry L. Hench, David M. Gaisser, The Genetic Basis for Osteogenesis Stimulation by Controlled Release of Ionic Dissolution Products. Transactions of the Orthopedic Research Society, Annual Meeting, San Francisco, California, USA. March 2008: 1697.

ordering information



NovaBone Putty – Syringe Delivery

Cat. No.	Description
771600	0.5cc
771601	1cc
771602	2.5cc
771605	5cc
771610	10cc



NovaBone Morsels – Syringe Delivery

Cat. No.	Description
772810	10cc (2-5mm)
772815	15cc (2-5mm)
771810	10cc (1-2mm)
771815	15cc (1-2mm)



NovaBone Morsels

Cat. No.	Description
770805	5cc (2-5mm)
770810	10cc (2-5mm)
770815	15cc (2-5mm)



NovaBone Particulate

Cat. No.	Description
770704	2cc
770705	5cc
770710	10cc
770715	15cc

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