First in the world

Activa IM-Nail[™]

A bioabsorbable intramedullary nailing

No removal. Patient friendly.



better healing - better life





Get better with Activa IM-Nail[™]

The first bioabsorbable intramedullary nail in the world!

The doctor found out that Peter had the diaphyseal forearm fracture.

2.

Good news for Peter: Only one operation is needed and the technique is mini-invasive. Doctor has decided to use Activa IM-Nail™

Peter 10 years hurt his forearm in an accident in the summer.

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The Activa IM-Nail[™] bioabsorbable nails are constructed of bioabsorbable poly(L-lactide-co-glycolide) (PLGA) and X-ray positive tricalcium phosphate (TCP) markers.

Activa IM-Nail™ Patents: Finland: FI124190, USA: 9078714 B2, 9393060 B2, EPO: EP1864616, EP2127608 Secure and metal free development of child`s skeleton.

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Cost efficient for the family and economical solution for the society.

In winter the functionality of Peter's forearm is restored and Peter returns to sport activities.

3.

Easy recovery without removal operation, reanesthesia and related possible complications.

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The first bioabsorbable intramedullary nail in the world!

Select the appropriate implant for the indication. Select the implant whose diameter is as close as possible to the smallest diameter of the bone marrow canal.

The more angulated/displaced bone is in most cases first addressed and stabilized.



RADIUS:

Make a small longitudinal incision over the dorsolateralmetaphyseal surface just proximal to distal physis.

Caution: Pay attention regarding the dorsal branch of the superficial radial nerve.

Make an entry portal into the cortical bone using a bone awl or a drill bit; At first, place the awl or drill bit perpendicular to the cortex to make a start for the entry portal.

Slowly lower the awl or drill bit to the slightest possible angle relative to the shaft axis. Now advance the awl or drill bit at this angle until it reaches the medullary canal.



Dilate medullary cavity through the fracture plane using appropriate dilator for the implant. Left the dilator to bone marrow canals until it is time to insert bioabsorbable implant.

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ULNA:

For the antegrade approach make a small longitudinal incision on the radial side of the proximal metaphysis.

Make an entry portal into the cortical bone using a bone awl or a drill bit.

Dilate medullary cavity through the fracture plane using appropriate dilator for the implant.



6.

Remove and replace the dilators by implant one by one.

Insert the Activa IM-Nail [™] using the inserter. Avoid rotational movements.

Insert the nail pass across the fracture by monitoring the Activa IM-Nail [™] position with fluoroscopy without crossing the physis.

After insertion, cut the Activa IM-Nail [™] using scissors, an oscillating saw, or a hot wire.

Smooth the proximal end of the implant at least to the cortical level, to avoid soft tissue irritation.

Close the wound in layers applying standard principles. Immobilize the forearm with the elbow flexed to 90 degrees using the cast according to the Instructions For Use.

bioretec

Activa IM-Nail[™] product range

REMARK

Prior to using Bioretec Implants examine thoroughly the Instructions For Use - inside each product package.

ORDERING INFORMATION

For more information please contact your nearest distributor or our customer service at Sales@bioretec.com. Valid product range available from our website: www.bioretec.com.

Product range

Product Code	Description
B-ANIM-20200	Activa IM-Nail™ 2.0 mm x 200 mm
B-ANIM-20300	Activa IM-Nail™ 2.0 mm x 300 mm
B-ANIM-20400	Activa IM-Nail™ 2.0 mm x 400 mm
B-ANIM-27300	Activa IM-Nail™ 2.7 mm x 300 mm
B-ANIM-27200	Activa IM-Nail™ 2.7 mm x 200 mm
B-ANIM-27400	Activa IM-Nail™ 2.7 mm x 400 mm
B-ANIM-32200	Activa IM-Nail™ 3.2 mm x 200 mm
B-ANIM-32300	Activa IM-Nail™ 3.2 mm x 300 mm
B-ANIM-32400	Activa IM-Nail™ 3.2 mm x 400 mm
B-INIM-2000	Dilator for 2.0mm intramedullary nail
B-INIM-2700	Dilator for 2.7mm intramedullary nail
B-INIM-3200	Dilator for 3.2mm intramedullary nail
B-INIM-4000	Inserter for intramedullary nail

INDICATION

Activa IM-Nail[™] is intended for intramedullary nailing of diaphyseal forearm fractures (radius or ulna or both) in pediatric patients in the presence of appropriate immobilization.

In diaphyseal forearm fractures the Activa IM-Nail[™] is indicated for the patients from 3 years to under 13 years, but the age limits depend on the biological development of the child.

CONTRAINDICATIONS

- 1. Oblique spiral fractures, multifragmentary fractures, metaphyseal and epiphyseal fractures.
- 2. Situations where internal fixation is otherwise contraindicated, e.g., active or potential infection, or where a patient's cooperation cannot be guaranteed.

UNIQUE AND INNOVATIVE BIOARBORBABLE INTRAMEDULLARY NAIL

- Enables intramedullary reduction, stabilization and alignment of fracture to facilitate bone healing.
- The advantages of closed reduction and IM nailing include a minimally invasive form of treatment of fractures and avoiding large incisions.
- In the case of the pediatric patients, the flexibility of the intramedullary nail allows it to be inserted at a point that does not disturb or disrupt the growth plate.

BIOABSORPTION ELIMINATES RISKS OF LONGTERM COMPLICATIONS

The bioabsorbable material of Activa IM-Nail[™] is used worldwide with pediatric and adult patients.

- No need for removal operation
 - The removal operation also always possesses the risk of anesthesia complications and infection.
 - The removal operation causes needless discomfort and concern especially for the pediatric patients and their parents.
- Eliminates long term complication risks, such as the stress shielding, pain, local irritation, an attractive surface for bacteria, endogenous infection, release of metallic ions in metallic implants.
- Long-term interference with children's growing skeleton is avoided.

X-RAY POSITIVE MARKER

• Easy position imaging during the operation due to X-ray positive TCP marker in the tip of Activa IM-Nail™.



Our mission is to introduce novel innovative, high quality bioabsorbable surgical devices, which improve patient healing, safety and cost-efficiency in clinical care. Ultimately the company goal is to improve the quality of life of people.

better healing - better life www.bioretec.com

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