Product Information

Proximal Femoral Bionic Nail

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|--|---|
| 078970170 078971200/078972200 078971240/078972240 078980170 078981200/078982200 078981240/078982240 078981240/078982240 078990170 | Φ9×170mm Φ9×200mm(L/R) Φ9×240mm(L/R) Φ10×200mm(L/R) Φ10×200mm(L/R) Φ10×200mm(L/R) Φ11×170mm |
|)78990170 | Φ11×170mm |
|)78991200/078992200 | Φ11×200mm(L/R) |
| 078991240/078992240 | Φ11×240mm(L/R) |
| 079000170 | Φ12×170mm |
| 079001200/079002200 | Φ12×200mm(L/R) |
| 079001240/079002240 | Φ12×240mm(L/R) |

Tension Screw

| REF. | Size |
|---------------------|------------------|
| 077400080-077400110 | Ф5×80mm-Ф5×110mm |
| | (5 increments) |

Large Compression Screw

| REF. | Size |
|---------------------|--|
| 079020090-079020120 | Φ10.5×90mm-Φ10.5×120mm (5 increments) |

Compression Screw

| REF. | Size | |
|-----------|-----------|--|
| 074840045 | Φ6.3×45mm | |

4.9mm Locking Screw II

| REF. | Length |
|---------------------|--------------------------|
| 071210026-071210080 | 26mm-80mm (2 increments) |
| 071210085 | 85mm |

End Cap

| REF. | Length | |
|---------------------|--------------------|-------|
| 077410000-077410005 | 0mm-5mm (5 increme | ents) |

Indications

- Intertrochanteric fractures, peritrochanteric fractures

Contraindications

- General or local infection, osteomyelitis
- Patient can ' t tolerate operation or anesthesia because of poor health
- ORIF will lead to local infection or skin necrosis

because of poor local soft tissue

- Severe osteoporosis

- Open fracture, obvious contamination

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DOUBLE MEDICAL



Proximal Femoral Bionic Nail





Nail

- 130° CCD angle provide more options for different anatomy.
- Medial-lateral angle of 5° allows insertion at the tip of the greater trochanter.
- Lateral flat cut design for easier insertion and lower pressure on the lateral wall.
- Smaller proximal diameter for protection of soft tissue.
- Distal long groove cutting disperse stress to prevent fractures around the nail.



"Leverage-fulcrum reconstruction" theory

1. The anatomy of the normal human hip joint is similar to a lever system. The fulcrum is located near the center of the femoral head, the lever arm of the medial compressive group is shorter, and the lever arm of the lateral tensile group is longer. Therefore, the hip joint can bear a greater weight and perform various actions.

2. The purpose of the operation is to establish a new lever system through the internal fixation system to replace the original lever system until the fracture is healed.

3. The postoperative stability of fracture depends on the type of fixation, and has no relationship with the types of the fracture.

4. The fulcrum reconstruction position of new internal fixation system is more closer to the anatomical and physiological fulcrum, the more stable the postoperative fracture will be.



Schematic diagram of the lever structure formed by the Bone Trabecula of the proximal femur:

- F1: the compressive stress (dynamic)
- F2: the tensile stress (resistance)
- The intersection of the main tensive bone trabecula and the main compressive bone trabecula forms the fulcrum of the lever structure. L1 is the power arm, L2 is the resisting arm.



B: the Large Compression Screw used to restore the compressive bone trabecula.C: the Tension Screw used to restore the tensive bone trabecula.D: the new fulcrum for reconstruction at the

intersection of screw B and screw C.

E: the Compression Screw used for fracture ends.

Anterior arch fits to the femoral anatomy





Large Compression Screw & Compression Screw

- Unique combined compression locking screw: continuous pressurization to eliminate the "Z" effect.
- The end of compression screw: fix the nail in the medial side of the medullary cavity to reduce the pressure of lateral wall.
- Gear structure: controllable rotation during reduction provides linear pressurization.



Tension Screw

- Self-tapping design facilitate intraoperative insertion.
- Torxdrive screwdriver, lower the risk of screw loose.

Locking Screw

- Self-tapping design facilitate intraoperative insertion.
- Locking screw design with double lead thread for easier insertion.
- Torxdrive screwdriver, lower the risk of screw loose.



End Cap

- Increase instant stable fixation for unstable fracture.
- Torxdrive screwdriver, lower the risk of end cap loose.





Aiming Shaft

- Made of carbon fiber material, light weight and radiolucent.
- One jig for insertion of spiral blade and locking screw, no need to change instruments during operation.
- A Guide Wire can be inserted through the hole in Aiming Shaft to detect femoral anteversion angle and the depth of the Nail into the medullary cavity.
- For unstable fracture, provide two k-wire holes for temporary anti-rotation fixation.

