Antegrade Femoral Nail (AFN)

Clinical case

AFN standard

Fig. 1a
Fig. 1b
Fig. 1c
Fig. 1d
Fig. 1e
Fig. 1f
Fig. 2a
Fig. 2b
Fig. 2c
Fig. 2d
Fig. 2e
Fig. 2f

Fig. 1 Preoperative X-ray; fracture classification AO 32-B2
Fig. 2 Postoperative X-ray at 3 months

Bibliography:


The new design of the Antegrade Femoral Nail (AFN) permits lateral access to the medullary canal. In addition to standard locking used for the treatment of shaft fractures, the nail provides the possibility of reconstruction locking. This locking option allows intramedullary fixation of subtrochanteric fractures and proximal fractures of the femoral shaft and neck using the new hip screws.

**Indications/contraindications**

**AFN Standard locking**
- Shaft fractures (32-A, B, C) Without C32-A [1–3].1 subtrochanteric section
- Without C32-B [1–3].1 subtrochanteric section

**AFN Reconstruction locking**
- Subtrochanteric fractures (32-A [1-3] and 32-B [1-3]) (fig. 1)
- Ipsilateral shaft fractures (32-A, B, C) and femoral neck fractures (31-B) (fig. 2)

**Contraindications**
- Isolated femoral neck fractures
- Supracondylar fractures (Elevation 32)
- Intertrochanteric fractures
- Femtrotrochanteric fractures

**Features and benefits**

**AFN**
- The levelled tip of the AFN facilitates nail insertion and minimizes stress concentration
- The anatomically pre-contoured nail facilitates insertion and provides the best possible fit for the implant in the medullary canal
- The most distal locking hole is only 14mm away from the nail tip, so it allows the treatment of very distal fractures
- The bevelled tip of the AFN facilitates nail insertion and minimizes stress concentration
- Two static locking holes and a dynamic one provide numerous distal locking possibilities
- The cannulation permitsreamed and unreamed nail insertion over the guide wire
- The cannulated end caps facilitate insertion using a guide wire with hook

**Fig. 1**
- The washers for the 6.5mm hip screw prevent the penetration of the screw through the lateral cortex in osteoporotic bone

**Fig. 2**
- The insertion point at the tip of the greater trochanter offers benefits with regard to possible lesions of the tendons, muscles and vascularisation