

Femoral Nail Entry Portals

1. Lateral trochanteric
 - a. Advantages
 - i. Easy access
 - ii. Fracture table
 - iii. Blood supply (medial femoral circumflex artery)
 - iv. Protection of musculature and soft tissues
 - v. Decreased blood loss
 - vi. Better access for obese or muscular patient
 - b. Disadvantages
 - i. Not a straight shot down femoral shaft
 - ii. May result in malreduction if entry site is not selected carefully
2. Piriformis fossa entry
 - a. Advantages
 - i. Straight shot down femoral shaft
 - ii. Nails are not left/right side-specific
 - b. Disadvantages
 - i. Entry point can be more challenging, especially with obese or muscular patient
 - ii. Soft tissue dissection is greater
 - iii. Increased blood loss
 - iv. Not for use in pediatric patients due to medial femoral circumflex blood supply
3. Retrograde entry
 - a. Advantages
 - i. Especially good for obese, pregnant, or muscular patient
 - ii. Allows better access for floating knee due to ability to access both distal femur and proximal tibia
 - iii. Small incision
 - iv. Better use for distal fractures with more availability of locking holes distally
 - v. Nails are not left/right side-specific
 - b. Disadvantages
 - i. May cause knee pain
 - ii. Need to access knee joint, potentially causing septic joint or heterotopic ossification