

Suprapatellar Versus Infrapatellar Tibial Nail Insertion

1. Suprapatellar

a. Advantages

- i. Can prepare and insert nail with knee extended
- ii. More simple access to entrypoint at proximal tibia
- iii. Avoids patellar tendon, theoretically less anterior knee pain
- iv. Avoids risk to infrapatellar nerve
- v. Avoids insertion through poor skin if skin at proximal tibia is damaged

b. Disadvantages

- i. Have to place instruments across the patellofemoral joint, potentially damaging joint surface
- ii. Higher impact loads across patellofemoral joint
- iii. Not as well studied as infrapatellar insertion

2. Infrapatellar

a. Advantages

- i. Tried and true method
- ii. No potential for damage to patellofemoral joint

b. Disadvantages

- i. Very difficult in proximal tibia fractures as knee is required to be flexed during nail insertion
- ii. Patellar tendon needs to be navigated around or through