Intramedullary nails for lower fibula in the distal fractures of both bones of the leg

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My disclosure is in the Final AOFAS Mobile App. I have no potential conflicts with this presentation.
« Intermedullary Nails for Lower Fibula Fractures »

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Abstract

Lower fibula shaft fractures are frequently associated with lower tibia fractures.

Controversy exists regarding fixation of these type of fractures. Especially in open injuries soft tissues might not allow an incision over the lower fibula.

Intramedullary nails have been suggested for restoring alignment and length of the broken fibula.

The aim of the study is to evaluate this mode of fixation.
Introduction and material

- Centro medullary nailing of the lower fibula was used in 26 patients over a four year period: 2009-2013.
- All were associated with lower tibia fractures.
- 16 of these injuries were open.
- 5 patients had tibial bone loss.
- Patients records were studied retrospectively.
Material

- External fixation was used in 13 cases.
Material

- Intramedullary locked nails were used in 8 cases.
5 cases were fixed with plates.
Methods

- A small stab incision was used for the nail insertion.
- Open reduction of fibula fractures was needed in three cases.
- To avoid the trouble of rotation with such fixation, it was necessary to provide the patient’s immobilization by a simple walking boot “Articulated Air-caste” or without any immobilization by promoting active and passive mobilization of the ankle with / or without support under the supervision of a physiotherapist; which keeps a good congruence of the fibula-taller joint.
Results 1

- All fibula fractures were consolidated, and no secondary surgery was necessary on the fibula.
- Satisfactory restoration of bone length, alignment and rotation was achieved.
- No fibular wound complication was encountered.
Results 2

- All tibia fractures without bone loss united well.
- The five others with bone loss were complicated by local infections and all required a bone graft later one or two times.
Conclusion

- Intramedullary nailing of lower fibula fractures is a suggested option for lower leg both bones fractures.