BRIDGE PLATE
This is a simple fracture with a small wedge. The fibula seems to be intact. It is important to discuss whether surgery is necessary. There are arguments in favor of conservative treatment in a young patient because the problem of secondary displacement into varus misalignment may arise when there is an intact fibula. In this case, the canal is probably slightly narrow. It is a good idea to measure the canal as an indicator, so that we can discuss the options of nailing or plating. I would not choose nailing if the canal is 7mm or less.
This is probably a young man.
Needles are used to mark the fracture.
They chose a plate; made one incision in the proximal part and one in the distal part through soft tissue windows at both sites, using scissors.
The implant is inserted from proximal to distal.
Distally, we see the saphenous vein.
Here, we can see that the plate is not optimally adapted distally. They chose a long plate. I think this is important when you are doing bridge plating or where you do not need absolute stability, as is the case with a nail or a bridge plate.
The plate is now bent...
...and inserted, in this case from distal to proximal. I think that is a good way to do it.
We have quite a nice adaptation of the plate. If you now needed to reduce the tibia against the plate, you could use a normal cortical screw. Alternatively, you can use the plate as an internal fixator, and fix it the way it is done here.
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Alternatively, you can use the plate as an internal fixator, and fix it the way it is done here.
Proximally. These are self-tapping, self-cutting screws. It seems they are fixed monocortically at the distal and proximal ends.
The plate is nicely aligned to the bone. This looks good.
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SCREW INSERTION SEQUENCE
Three screws distally and they use a plate as a template to determine the incision sites. This is a good trick.
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They are inserting another screw. These are all monocortical screws going into the lateral cortex but not going through to the second cortex. Distally, we have three screws.
SCREW INSERTION SEQUENCE
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Proximally, we have four screws.
We could discuss whether these are really monocortical screws going into the lateral cortex. But formally, these are monocortical screws. Proximally, you have four cortices nicely distributed. But distally, we could argue that we have just three cortices. At least, we will have a very flexible fixation with a good adaptation of the fracture.
The situation looks okay. Nice healing with this flexible fixation. It is interesting to see endosteal bone formation around the three distal screws. They seem to contribute importantly to stability and are under quite a lot of stress. So, a fourth screw would not have been wrong and the fixation would still have been flexible.