

and postoperative complications.

Results

Mean pelvic incidence was $54.86 \pm 11.82^\circ$. Lumbar lordosis (LL) was measured to $12.26 \pm 18.48^\circ$ preoperatively and increased to $42.73 \pm 14.05^\circ$ postoperatively ($p < 0.05$).

Mean gain of lordosis after PSO at index level (fig. 2), was calculated to $28 \pm 11^\circ$ [$14-41^\circ$]. SVA decreased postoperatively from 93.46 ± 36.69 mm to 61.73 ± 38.68 mm ($p < 0.05$).

Several complications ($n = 8$), including 2 minor (one dural tear with no clinical consequences and one transient radicular deficit) and 6 major with reintervention were observed in our series.

Conclusions

The main cause of mechanical complications was insufficient sagittal correction. To limit the risk of mechanical complications and to achieve a good sagittal balance, PSO must be associated with additional SPO's or a second corrective surgery to obtain a solid anterior fusion.

DIFFICULTIES IN CLASSIFICATION OF MALLEOLAR FRACTURES



Al. O. Șerban, B. Obadă, E. Borgazi, M. Zekra, V. Botnaru

Clinic of Orthopedics and Traumatology, Emergency County Hospital Constanța, Romania

Objective

Classification of malleolar fractures are a matter of debate. The Lauge Hansen and the AO-classification are defined as complicated, where the Weber-classification is too simplistic. In trimalleolar fracture is the role and the size of the posterior fragment an additional complicating factor.

Material. Methods.

Interobserver study: four observers (2 traumasurgeons, 2 radiologists) classified 100 X-rays to the AO-, the Lauge-Hansen- and the Danis-Weber classification. In case of a trimalleolar fracture they were asked to measure the size of the posterior fragment.

Results

Within the Weber classification, there is a lot of discussion whether the fracture is a proximal "Weber B" or a distal "Weber C". This problem also exists in the AO-classification. In addition, it is not possible to classify the isolated medial malleolus fracture. The biggest problem of the Lauge-Hansen classification is that anamnestic (and in particular radiological) the trauma-mechanism remains unclear. As a result, it is possible to classify identically fractures in different groups. Small posterior avulsion fragments prove difficult to determine on the initial X-ray. Overshadowing of the fibula is the avulsion of a very small fragment shows to be limiting factor. Fixation if posterior fragments is, in most literature, dependent on the size if the posterior fragments. Some authors advocate that not only size but most important, the congruency of tibiotalar articular surface should be leading in choice of treatment for anatomic restoration. In that case, assessment of size if the posterior fragment is less important where the detection of smaller dislocated posterior fragment is of much more value.

Conclusions

The ankle X-ray is in most cases a useful tool in detecting clinical relevant fractures of the posterior malleolus however preoperative CT evaluation might be a very useful addition both in pre-operative planning and detection from smaller dislocated posterior fragments.

Keywords: malleolar fracture, classification, ankle

GAMMA-NAIL NAIL BREAKAGE IN THE OSTEOSYNTHESIS OF TROCHANTERIC FEMORAL FRACTURES



Al. O. Șerban, B. Obadă, M. Zekra, V. Botnaru, A. Coltofeanu, Silvana-Crina Alecu

Clinic of Orthopedics and Traumatology, Emergency County Hospital Constanța, Romania

Objective

Mechanical breakage of the implant is a rare complication attributed to delayed fracture union or nonunion. This study presents a series of cases of breakage and secondary lag screw dislocation after cephalomedullary nailing.

Material. Methods.

In a retrospective study between 02/2005 and 12/2013 we analyzed all patients with trochanteric and subtrochanteric fracture who had been treated by cephalomedullary nailing. Fractures were classified according to AO/OTA classification. 13 patients with third generation Gamma nail failure were included. 7 patients were women, and 6 men with a mean age of