Ankle fractures in Erdely Patients with comorbidities: Treatment with the augmentation technique

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DISCLAIMER

My disclosure is in the Final AOFAS Program Book.
I have no potential conflicts with this presentation
There is a great controversy over the better treatment of ankle fractures in patients above 60 years\(^1,2,3\) because the high rate of complications mainly in patients with systemic comorbidities\(^4,5,6\).

**OBJETIVO**

The purpose of this study was to evaluate the results on elderly patients with ankle fracture, operated by the augmentation technique.
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**MATERIAL**

- Period December 2006 to October 2010.
- 16 patients with ankle fracture and systemic comorbidities all 44 B or C of the AO-OTA system.
- Age: 61 and 88 years (Median 72 years)
- 10 patients were diabetics type II, 8 smokers, four had kidney disease, two patients had rheumatoid arthritis and six patients were chronic users of corticosteroid.
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**MÉTODO**

- Augmentation fixation (conventional fixation of fracture and increased syndesmosis fixation)\(^4\),
- Early mobilization and released full support with 8 weeks of PO
- The results were evaluated as the function, complications, reoperations number (return material or additional surgeries), re-hospitalization and mortality\(^7,8\).
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RESULTADO

✓ Follow-up of 18 to 48 months (average of 28 months

✓ Six superficial infections with improved with antibiotic and others two with skin necrosis that required skin graft.

✓ None patient have lose of reduction or implant loosening that need reoperation
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RESULTADO

✓ 8 patients were removed the screws of syndesmosis, in 5 patients were removed all the synthesis by loosening of screws.
✓ The patients age doesn’t show difference on final results.
✓ All patients returned to walk and their daily activities.
✓ Satisfaction: 15 (93.75%) are satisfied One was with restricted due to limitation of physical activity.
✓ Four patients need new hospitalization due to uncontrolled diabetes and all patients are alive.
✓ No patient by this time necessitated new fixing or Ankle arthrodesis.
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**CASE**

NNV, 82Y, FemDM Type II, osteoporotic bone 1) pre-op. 2) POI., 3) Skin Necrosis w/8 weeks PO. 4) Follow-up

8m PO 16m PO 24m PO
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**DISCUSSSÃO**

- Osteopenic bones exhibit high rates of complications when undergoing conventional surgical techniques\(^1,^2,^8\), in the pursuit of improving the stabilities of fixation of these fractures were developed fixings blocked\(^7\), but these are not always accessible to your use, as well as features high cost, making it impossible for its use on a regular basis.
- The fixation with the technique of "augmentation" is presented in the literature as a low-cost and affordable option to your job, so is a stable mounting in osteopenic bone patients, slowing down the rate of complications\(^4\).
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**DISCUSSION**

- The method of fixation of the screw of the fibula to the tibia can help improve rigidity, strength, stress, axial deformation and failure[^4][^7], same facts are described when the use of additional anchorages in fractures of the ankle, which was demonstrated in our cases, presented tissue necrosis exposure and/or release of synthesis material but without the loss of fracture reduction until its consolidation, which is expressed by the return of our patients to their pre-injury levels activities.
CONCLUSÃO

• The fixation of ankle fractures with the augmentation technique in patients above 60 years, bearers systemic comorbidities demonstrated safe and stable.

• It allows the mobilization and early weight bearing and progressive load, demonstrated by low rates of complications, as well as the patients' satisfaction index of 93.75%.
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