Lateral Minimally Invasive Plate Osteosynthesis
Using Anterolateral Locking Plate
in distal tibial fractures

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CONFLICT TO DISCLOSE

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My disclosure is in the Final AOFAS Mobile App. I have no potential conflicts with this presentation.
Medial MIPO

- High energy trauma in distal tibia fx
- High energy trauma
  - wound problem at medial side
- Medial plate problem in Medial MIPO
- Limitations to intra-articular fx

→ Introduce Lateral MIPO
MATERIALS & METHOD

• Lateral MIPO plating in Distal tibia fx.
• 17 case
• 53.8yr (31- 71yr)
• M : F = 11 : 6
• TA : 9, fall from height : 6, Slip down : 2

• All pts. open fx. or severe soft tissue injury
• Injury day or next day Sono guided PNB
  → EF apply for damage control
• After damage control AL MIPO
• Union, ROM, complications, op. time, Bleeding, IOWA ankle rating score
RESULTS

- Union: mean 15.7 weeks (12-20)
- Op. time: mean 41 min
- Bleeding: mean 21 cc
- ROM DF: mean 15°, PF: mean 25°
- IOWA ankle rating score: mean 83.3
- Excellent: 12 cases, good: 5 cases

- Complications: 2 cases
  1) Superficial infection
     - DM, improved by additional antibiotics
  2) Deep peroneal nerve irritation
     - DM, 1st web space numbness
CASE

- F/71
- slip down
- DM, HTN, MI
- warfarin, aspirin
Anterolateral MIPO
DISCUSSION

**Medial MIPO**
- Biologic fixation
- High union rate
- Indirect reduction: angulation
- Medial plate irritation & skin necrosis

**lateral MIPO**
- Biologic fixation
- Low complication
- High union rate
- No plate irritation
- Possible Intra-articular reduction
CONCLUSION

- Distal tibia fracture
- High-energy trauma, medial soft tissue inj.
  - Two stage + AL MIPO
- Damage control
- Biologic fixation – rapid union
- Intra-articular reduction


