



# Ankle Fracture

Ready. Set. Go!

If you can get through this round of hard core interview questions, you can get through anything. These are tough but remember the basics, be methodical.

# Case

- HPI: 29 year old female presents to ED by ambulance for MVA. Patient states her right foot really hurts.
- ED physician has already stabilized patient and paged you to come assess the patient.

*What else do you want to know?*

# Past History

- Illnesses: none
- Meds: Advil
- Allergies: PCN
- PSx/Hosp: tubal ligation
- FamHx: none
- SocHx: 1 PPD tobacco x 20 yrs, 2 drinks ETOH a day, + marijuana use
- ROS: negative

*What do you want to know next?*

# Objective

## Vitals:

- HR 88,
- RR 14,
- BP 140/90,
- Temp 99F



# Read This Radiograph

1. Classify the injury using  
two different systems?



# Read This Radiograph

2. Any further diagnostic imaging you would like to get?



# Read This Radiograph

3. How would you reduce this injury?



# What labs would you order?

- Why?



# Assessment

- What is your assessment for this patient?

# Plan:

- What is your plan for the patient while in the ED?
- What is your plan for surgery today?

# Pimp Questions

Ankle Fractures

# Pimp Questions

1. What ligaments comprise the syndesmosis?
2. What nerve must you avoid when making incision at the fibula?
3. What type of joint is the ankle joint classified?
4. When do you fix posterior malleolus fractures?
5. What angle does the magic angle effect occur?

# Pimp Questions

1. Describe Ramsey and Hamilton's study?
2. How can you check if the syndesmosis can be ruptured?
3. Where will you place your syndesmosis screw?
4. Will you keep the foot in neutral, DF, or PF when you place your syndesmotic screw?
5. Will you take out the syndesmotic screw? Why or why not? If so, when?

# Answers

# Case

- HPI: 29 year old female presents to ED by ambulance for MVA. Patient states her right foot really hurts.
- ED physician has already stabilized patient and paged you to come assess the patient.

## *What else do you want to know?*

- Open wounds? Skin Tinting? Tetanus? Last meal?
- Tingling, numbness, burning, shooting pain? NeuroVascular assessment?
- Any headaches, changes to vision, SOB?

# What labs would you like to order?

- Why?
  - CBC,
  - chem-7,
  - coags,
  - A1c,
  - blood/wound cultures?,
  - UA,
  - albumen, and pre-albumen
- No ESR, CRP, EKG, CXR,



# Plan:

- What is your plan for the patient while in the ED?
  - Due to edema, ecchymosis, and fracture blisters present I would place the patient in a Jones compression dressing
- What is your plan for surgery today?
  - Today place an ex fix then transition to ORIF at a later time

# Pimp Questions

1. What ligaments comprise the syndesmosis?  
AITFL, PITFL, interosseous ligament
2. What nerve must you avoid when making incision at the fibula? Sural nerve
3. What type of joint is the ankle joint classified? A hinge type synovial joint
4. When do you fix posterior malleolar fractures? Per McDaniel, when >25% or greater than 2-5cm translated
5. What angle does the magic angle effect occur?  
54.74, MRI artifact of tightly bound collagen

# Pimp Questions

1. Describe Ramsey and Hamilton's study? 2cm of talus causes 42% decrease in surface area
2. How can you check if the syndesmosis can be ruptured? Squeeze test, external rotate, or gravity foot test
3. Where will you place your syndesmosis screw? 2-4 cm proximal to AJ or 1cm to syndesmosis
4. Will you keep the foot in neutral, DF, or PF when you place your syndesmotic screw? Dorsiflex the foot b/c talar dome is wider anterior
5. Will you take out the syndesmotic screw? Why or why not? If so, when? before WB, since it may lead to breakage

# The End

Great Job!