Mr. Z is a 45 year old man who was the driver involved in a motor vehicle collision approximately two months ago. He presents to your general physiatry clinic with a complaint of left shoulder pain, present since the accident but worsening. He highlights that it is particularly painful at nighttime, and with associated activities such as pushing or pulling of the arm. You were able to access his trauma scans and it did include an anterior-posterior (AP) and lateral x-ray of the left shoulder with no bony injury or dislocation.

1. What is your differential diagnosis for shoulder pain post trauma?

Discuss as a group and when ready go to the next question

2. What specifics during history and physical examination will be relevant to identify the current pathology?

Please review special tests of the shoulder and scapulae. *Italics correspond to patient history in this case* 

Discuss as a group and when ready go to the next question

#### **History:**

- **Preexisting pain or symptoms** No history of shoulder pain or injury
- **Location** discrete or generalized, multifocal, radiating anterior and lateral shoulder, from mid acromion to upper arm. Not pain or radiation to neck or elbow.
- Onset- immediately acute post trauma or gradual onset, constant or fluctuant Noted pain to shoulder within few days of accident/surgery. Minimal at rest, fluctuates when moving or any pressure applied to arm/shoulder.
- **Provoking or Palliating** Response to movement, weight bearing, modalities or medication. Has responded to HM prescribed for leg pain, but now weaning off as leg pain improves, shoulder pain persists. Very painful if rolls onto it at night. Pain with any reaching, pushing or pulling activity.
- Quality somatic vs neuropathic components, mechanical symptoms Aching pain with occasional stabbing components. No paresthesias, pins an needles, or distal weakness. He has noted some clicking in the shoulder, no severe clunking
- Radiation no radiation down to hand or up to neck
- **Severity** VAS scale (1-2/10 at rest, 7-8/10 at worst with activity)
- Treatment has not tried any treatment yet
- Past Medical History, Medications, Occupational, Social history, developmental Any risk factors for shoulder pathology In this case no significant past medical history, no use of medications that could have tendinopathic effects, no occupational or sports/hobbies involving heavy use of the shoulder.
  - 3. Mr. Z is noted to have a history and exam consistent with rotator cuff pathology (anterolateral shoulder pain, positive empty can test, pain with resisted internal/external rotation). You were able to access his trauma scans and it did include an anterior-posterior (AP) and lateral x-ray of the left shoulder with no bony injury or dislocation. Imaging on review of previous x-ray, acromiohumeral invterval is 7 mm.
    - Mr. Z asks you about ordering an MRI. What will you order and explain your rationale to Mr. Z.

Discuss as a group and when ready go to the next question

4. Imaging is completed revealing a partial thickness, 1 cm articular sided tear of the supraspinatus. Mr. Z asks you if he should see a surgeon for the tear and who is generally a good candidate for surgery. Should Mr. Z be referred for surgical consultation? What can you tell him about what surgeons generally consider before offering a rotator cuff repair?

Discuss as a group and when ready go to the next question

5. Mr. Z is not sure if he has coverage for physiotherapy through his motor vehicle accident claim. He asks you to advise him on exercises that he can do at home. Please review principles of a physiotherapy program for scapular stabilization and rotator cuff rehab.

Be prepared to present this case with your answers to the large group