## Priority Topic: FRACTURES

### Key Features:

1. In a patient with multiple injuries, **stabilize the patient** (e.g., airway, breathing, and circulation, and life-threatening injuries) before dealing with any fractures.

   ✓ **Just do it!** see also **Priority Topic Trauma**

2. When examining patients with a fracture, **assess neurovascular status** and examine the joint above and below the injury.

   **What you should study:**

   ✓ Neurovascular Exam - Royal Children’s Hospital Melbourne

   ✓ **REMEMBER to examine the joint ABOVE and BELOW always!**
     EM Cases Episode 1: Occult Fractures and Dislocations the podcast addresses this point with illustrative cases

3. In patients with **suspected fractures** that are prone to have normal X-ray findings (e.g., scaphoid fractures in wrist injuries, elbow fracture, growth plate fracture in children, stress fractures), **manage according to your clinical suspicion**, even if X-ray is negative.

   **What you should study:** know your SALTER-HARRIS classification

   ✓ Stress Fractures AAFP 2011
   ✓ Scaphoid Fractures AAFP 2004
   ✓ EM Cases Episode 1: Occult Fractures and Dislocations
   ✓ Radiographic evaluation of common paediatric elbow injuries
   ✓ Radiographically occult and subtle fractures 2013
4. In **assessing elderly patients** with an acute change in mobility (i.e., those who can no longer walk) and **equivocal X-ray findings** (e.g., no obvious fracture), **investigate appropriately** (e.g., with bone scans, computed tomography) before excluding a fracture.

**What you should study:**

- ✓ EM Cases Episode 1: Occult Fractures and Dislocations *First case on hip pain*
- ✓ Evaluation of the Patient with Hip Pain AAFP 2014 *not specific to elderly.*

5. **Identify and manage** limb injuries that require **urgent immobilization and/or reduction** in a timely manner.

**What you should study:** *these articles don’t cover closed reduction.*

- ✓ Splints and Casts - Indications and Methods AAFP 2009
- ✓ Principles of Casting and Splinting AAFP 2009

6. In assessing patients with suspected fractures, **provide analgesia** that is **timely** (i.e., before X-rays) and **adequate** (e.g., narcotic) analgesia.

**What you should study:** Just do it! but if you really want an article...

- ✓ Decreasing time to pain relief BMJ 2016

7. In patients presenting with a fracture, look for and diagnose **high-risk complications** (e.g., an open fracture, unstable cervical spine, compartment syndrome).

**What you should study:**

- ✓ Open Fracture Guidelines BOA 2017
- ✓ Unstable C-spine Fractures YouTube video
- ✓ Compartment Syndrome Review 2014
8. Use clinical decision rules (e.g., Ottawa ankle rules, C-spine rules, and knee rules) to guide the use of X-ray examinations.

**What you should study:** memorize these!

- Ottawa Ankle Rules
- Ottawa Knee Rules
- Canadian C-Spine Rule

**Note:** These key features do not include technical and or psychomotor skills such as casting, reduction of dislocations, etc. See Procedural Skills.

**Some other useful resources:**

- EM Cases Digest 1: MSK & Trauma 2015
- Foot fractures AAFP 2016
- Hip Fracture AAFP 2014