X-RAY GUIDELINES 2

WRIST X-RAY VIEWS



THUMB X-RAY VIEWS



KNEE X-RAY VIEWS



WRIST X-RAYS

– a *4-view wrist* is standard (AP, lateral, oblique, and scaphoid view) except for patients under the age of 8, whose scaphoid has not fully formed. On these young patients, get a 3-view instead

– on patients with *obvious deformity*, order a *3-view*: in the setting of a distal radial fracture, it is extremely painful for a patient to ulnar deviate to isolate the scaphoid, and therefore the 4th view typically does not add any information

- **wrist reduction** should be performed on distal radial fractures with **greater than 20 degrees angulation** or with any **significant visible deformity**, for patient comfort while they await surgical evaluation and to decrease risk of neurovascular injury

– advise the patient that sometimes, even **nearanatomic reductions** go on to require surgical correction

THUMB X-RAYS

– for all finger x-rays, *3 views* are standard (AP of hand, oblique of affected digit, and lateral of digit)

– pay careful attention to *avulsion fractures* at the base of the proximal phalanx on the lateral view: this is a common injury seen with skier's thumb that may lead to a *Stener lesion*

- watch for a *fracture-dislocation* at the base of the first metacarpal: this is called a *Bennett's fracture*, which represents an unstable joint that requires surgery

KNEE X-RAYS

– most knee x-rays ordered at the resort clinics are a simple *2-view* (AP and lateral) series

– on the AP view, look carefully at the *lateral edge of the tibial plateau*: an avulsion fracture here is known as a *Segond fracture,* which is nearly pathognomonic for an *ACL tear*

– the only reason to order a *3rd view* (the "sunrise" or "skyline") is to get a top-down look at the patella

– the only reason to get a *4-view* (AP, lateral, medial oblique, and lateral oblique) is to more fully evaluate for a *tibial plateau fracture*. when considering whether to order these films, note the following:

- does the mechanism described have *enough force* to fracture the tibia (or, alternatively, is the patient at risk for *osteoporosis*)?
- does the patient have an *effusion*?
- is the patient **unable to bear weight**?

– the absence of any or all of the above findings does not rule out a tibial plateau fracture, but each positive answer increases the likelihood that a 4-view x-ray is needed