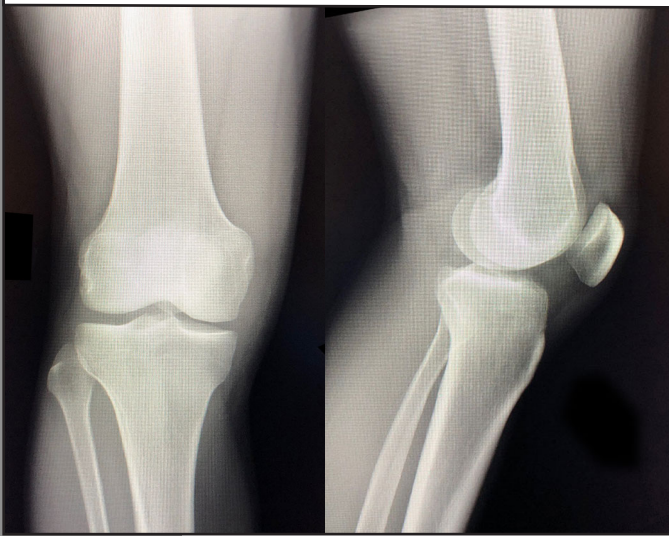


X-RAY GUIDELINES 3:

KNEES AND THE TIBIAL PLATEAU

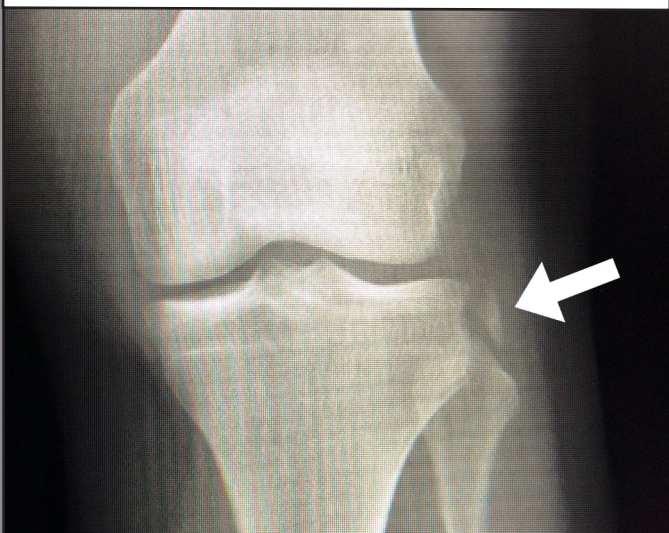
KNEE X-RAY 2 VIEWS



KNEE X-RAY SUNRISE VIEW



SECOND FRACTURE



KNEE X-RAYS

- most knee x-rays ordered at the resort clinics are a simple **2-view** (AP and lateral) series
- 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** (2-view + medial and lateral obliques) 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?
 - is the patient at risk for **osteoporosis**?
 - does the patient have an **effusion**?
 - is the patient **unable to bear weight**?
- a negative answer to any (or all) of the above questions does not rule out a tibial plateau fracture, but each positive answer increases the likelihood that a 4-view x-ray is needed
- tibial plateau fractures can be evaluated using the **Schatzker classification** system

SECOND FRACTURES

- on the AP view, look carefully at the **lateral edge of the tibial plateau**: an avulsion fracture here is known as a **Second fracture**
- a Second fracture has a >95% correlation with, and is nearly pathognomonic for, an **ACL tear**

TIBIAL SPINE/EMINENCE FRACTURES

- in younger patients, knee ligaments are often stronger than the bones they are attached to, and may avulse the **tibial spine** (typically anterior) or the entire **tibial eminence**
- in older patients, bones may be osteopenic or osteoporotic, and the anterior tibial spine may avulse
- the prognosis for a tibial eminence/spine fracture is often better than an ACL tear, if treated appropriately

TIBIAL SPINE FRACTURE

