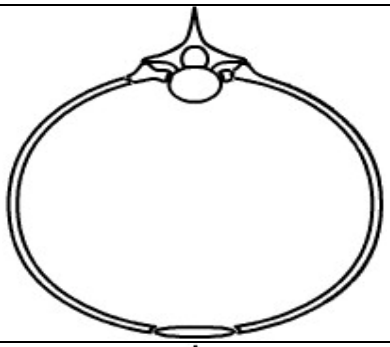
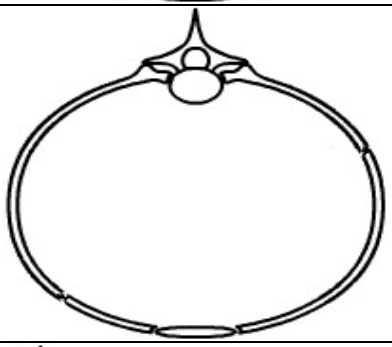
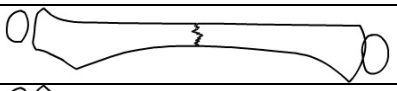
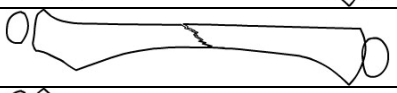
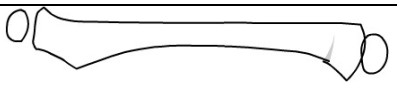
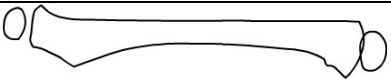
Fracture	Illutration	Biomechanics	Notes
Rib, Posterior		Squeezing with back unsopported	Rib fractures in infancy are from abuse 80% of the time. Accidental rib fx result from motor vehicle crashes, adults falling onto children, conditions causing bone fragility, and occasionally the birth process.
Rib, Lateral or Anterior		Squeezing or direct impact	
Classic Metaphyseal Lesion		Shearing across bone end	The strongest radiological sign of abuse. A rare birth or accidental injury, occurs in advanced OI, and during casting for club-foot
Transverse		Bend or Blow	These fractures absorb the most energy, and require the greatest force.
Shallow Oblique		Bend or Blow	
Oblique		Bend plus torsion	Often confused with a spiral. Probably requires greater energy and force.
Spiral		Torsion	Spirals absorb limited energy and may not require great force. Toddler's fracture of the tibia, is a well known spiral.
Impacted		Angulation with axial load	Impacted Fx of the distal posterior femur is know to occur from simple bed falls. Principally occurs at the dia-metaphyseal junction
Buckle		Angulation with axial load	Differentiate from impacted Fx by no break in the cortex. Otherwise similar
Torus		Axial load	Term is often used more broadly. True torus requires buckling 360^{o} around the bone.

Films in a Skeletal X-ray Survey

AP and lateral skull
Lateral C-spine
AP, lateral and bilateral oblique ribs
Lateral LS-spine
AP abdomen and pelvis
AP humerus right and left
AP radius and ulna right and left
AP femur right and left
AP tibia and fibula right and left
Oblique hands right and left
AP feet right and left

Each film must be appropriately aligned and exposed for the focal region. Combining humerus with radius and ulna, or femur with tibia and fibula will decrease sensitivity to metaphyseal injury