

Special Considerations for Paediatric Skeletal Trauma

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Imaging the skeletal system of children requires particular consideration of the immaturity of the skeleton, the evolutionary changes of growth and maturation, the susceptibilities of children to particular types of injury and the rate at which healing occurs. These factors are important for diagnosis, making management decisions, prognosis and follow-up. They are also important for medico-legal action particularly when non-accidental injury is considered.

This presentation will focus on the anatomic appearances of the pediatric skeleton that affect trauma interpretation, such as skull sutures, physes, cartilaginous components and stage of development. It also aims to present MRI as a problem solving solution in a number of scenarios including physal injuries (including SUFE) and their complications, distinguishing dislocations from fractures the advantages of MRI for identifying associated soft tissue and organ abnormalities (e.g. diffuse axonal injury, retinal detachment, SCIWORA).