

PAEDIATRIC RADIOGRAPHIC PROTOCOLS

EMERGENCY DEPARTMENT

Revised October 2016

ANATOMY	INDICATION	PROJECTIONS
<u>CHEST</u> N.B. MARKER AT TIME OF EXPOSURE AT ALL TIMES.	<u>Respiratory :</u> • Lower respiratory tract infection / Pneumonia • Chest trauma. • Pneumothorax. • Haemothorax.	<u>PA Erect CXR</u> • AP Erect, if PA not possible • AP Supine, if above not possible <i>Remove all clothing.</i> <i>Depending on age of child, always attempt an Erect x-ray first.</i> <i>Lateral not to be performed routinely.</i>
	<u>Cardiac</u> • Clinical cardiomegaly. • Heart failure. • Heart murmur • Hypertension	<u>PA Erect CXR</u> • <u>AP erect</u> or <u>AP supine</u> if more appropriate / above not possible
	<u>Other</u> • Inhaled FB	<u>Lateral Soft Tissue Neck</u> <u>PA erect CXR</u> • AP erect or AP supine if more appropriate • Expiratory CXR may be requested if FB confirmed in chest

ANATOMY	INDICATION	PROJECTIONS
<u>ABDOMEN</u>	<u>Gastrointestinal</u> • Suspected bowel obstruction. • Bowel perforation* • Intussusception • Suspected abdominal mass.	<u>PFA</u> - to include from diaphragm to symphysis pubis. • * <i>Erect CXR also indicated in suspected bowel perforation</i>
	• Blunt trauma – <i>needs surgical assessment to decide most suitable Imaging modality</i>	<i>PFA generally not indicated</i>
	<u>Others</u> • Vague abdominal pain. • Gastroenteritis. • Haematemesis. • Pyloric stenosis. • Appendicitis. • Chronic constipation. • Encopresis or enuresis. • UTI	PFA not indicated
	• Ingested Foreign Body	<u>Lateral Soft tissue Neck</u> <u>CXR – PA erect</u> (or AP erect or AP supine if more appropriate) <u>PFA</u> • <i>Single view of Chest & abdomen may be possible if size of child permits</i>

ANATOMY	INDICATION	PROJECTIONS
<u>SKULL</u>	Child abuse	<u>SXR – AP & Lateral</u> Only as part of Skeletal Survey
<u>SKULL</u>	Head trauma (not suspected child abuse)	Skull X-ray not indicated – CT to be performed if imaging required
<u>FACIAL BONES</u>	Facial trauma	OM 45° – Water’s view only
<u>NASAL BONES</u>	Suspected Fracture	Fracture a <u>clinical diagnosis</u> <u>Xray not indicated unless FB suspected</u> ¹

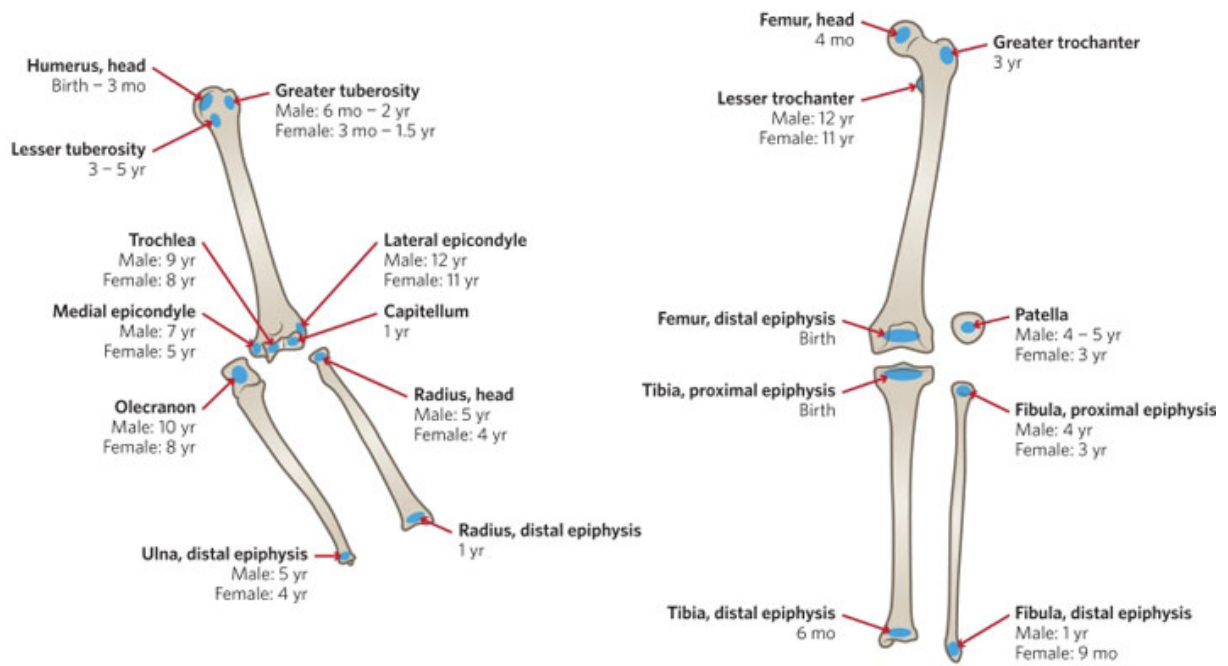
1. http://www.emed.ie/Trauma/Head-Neck/Max_Fax.php#nas - Clinical Dx - do NOT x-ray unless a FB is suspected.

ANATOMY		INDICATION	PROJECTIONS
<u>UPPER LIMB</u>	<u>Shoulder</u>	Trauma - (possible fracture or dislocation) Or Infection	<u>AP* & Axial</u> Half Axial & Y-view (both views always) if axial not possible
	<u>Clavicle</u>	Trauma - (possible fracture or dislocation) Or Infection	<u>AP* & 15-30 deg cranial tilt</u> <i>*If appropriate, AP view can include proximal humerus and full clavicle</i>
	<u>Scapula</u>	Trauma Possible fracture	<u>AP & lateral scapula (y-view)</u>
	<u>Humerus ;</u> <u>Radius & Ulna;</u> <u>Elbow</u>	Trauma - (possible fracture or dislocation) Or Infection	<u>AP and Lateral</u> of affected body part. <i>True AP and true lateral positions are very important</i> <i>Elbow imaging always separate from humerus or forearm if both asked for – i.e. 2 separate studies</i>
		“Pulled elbow” clinical exam + mechanism of injury suggest subluxed radial head.	<i>Radiographs not indicated</i>
	<u>Wrist</u>	Trauma (possible fracture or dislocation) Or Infection	<u>PA & Lateral</u>
	<u>Hand</u>	Trauma (possible fracture or dislocation) / Foreign Body Or Infection	<u>PA & Oblique</u> Lateral view if suspected FB
	<u>Finger</u>	Trauma (possible fracture or dislocation) / Foreign Body Or Infection	<u>PA & Lateral</u> Lateral view if suspected FB

ANATOMY		INDICATION	PROJECTIONS
LOWER LIMB	<u>Pelvis</u>	Trauma Limp with suspected.... - Perthes - Slipped capital femoral epiphysis (SCFE) - Unexplained	< 1 yr of age : <u>AP Pelvis</u> (legs internally rotated) > 1 yr of age : <u>AP & Frog Lateral views of Pelvis</u> Gonad shield for 1 view
		Suspected Developmental Dysplasia of the hip (DDH, CDH)	< 4/12 old – <u>Ultrasound</u> > 4/12 old - <u>AP Pelvis</u> (legs internally rotated)
	<u>Femur;</u> <u>Knee*</u> <u>Tibia & Fibula</u>	Trauma (possible fracture or dislocation) Or Infection	<u>AP and Lateral</u> of affected body part. <i>True AP and true lateral positions are very important</i> <i>* Knee Lateral must be HBL where there is a history of recent injury at any stage in the recent past</i>
	<u>Ankle</u>	Trauma (possible fracture or dislocation) Or Infection	<u>AP & lateral views</u> Additional mortise view if possible
	<u>Foot</u>	Trauma (possible fracture or dislocation) Or Infection	<u>DP & Oblique View</u> Lateral view if suspected FB
<u>Whole Upper & Lower limb</u>		Refusing to move whole limb (lower or upper) Refusing to weight-bear	First image most suspected site of injury, including nearest joint. Whole limb imaging may be justified - i.e. <u><i>Humerus, Forearm & hand</i></u> or <u><i>Pelvis, Femur, Tib/Fib & foot</i></u>

ANATOMY		INDICATION	PROJECTIONS
SPINE	<u>Cervical Spine</u>	Trauma	1. Lateral HBL priority. - One attempt at swimmers if C7/T1 junction not clear. 2. AP. 3. Odontoid peg view - If > 5 yr olds. Must be co-operative. - Note : >12 yrs C4-C7 injuries more common. <12 yrs C1-C3 injuries more common.
	<u>Thoracic spine</u> <u>Lumbar Spine</u>	Trauma Pain	1. AP & Lateral Chronic pain, in the absence of trauma, requires discussion with paediatric radiologist

Time of appearance of secondary ossification centres



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