

## NEUROLOGY PROTOCOLS

### PAEDIATRIC EPILEPSY NON TL

<b>CLINICAL INDICATIONS</b>	Seizures, without EEG documented focus
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<b>PATIENT PREPARATION</b>	<p>MRI safety checklist completed and checked.          Changed into patient gown or pyjamas.          NBM at least 2 hours unless requiring general anaesthetic.          Contrast consent performed incase required.          Hearing protection with headphones and/or earplugs.  <b>Emergency buzzer is essential if non GA.</b></p>
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<b>PATIENT SET-UP</b>	<b>POSITION</b>	Supine, head first. Immobilise using foam pads around the head and over ears.
	<b>COIL/S</b>	32Ch Head Coil ideally 12Ch Head Coil

<b>IMAGING PROTOCOL</b>	<b>SEQUENCES</b>	<b>RANGE AND ORIENTATION</b>
	<b>3 Plane Localiser</b>	Localiser through Head
	<b>t1_mpr_sag_p2_iso_</b>	Sagittal to the midline to cover the whole head
	<b>t2_tse_tra_512_</b>	Inferior to superior, to cover whole head, parallel to ACPC line and perpendicular to midline/base of temp lobes on the coronal
	<b>t2_tirm_tra_dark-fluid_fs</b>	Inferior to superior, to cover whole head, parallel to ACPC line and perpendicular to midline/base of temp lobes on the coronal
	<b>ep2d_diff_3scan_trace</b>	As per the t2_tse_tra
	<b>t2_tirm_cor_dark-fluid_fs_2mm</b>	Angled perpendicular to the AC-PC on sagittal plane and perpendicular to midline on axial. Coverage entire brain.
	<b>t2_tse_cor_320_2mm</b>	Angled perpendicular to the AC-PC on sagittal plane and perpendicular to midline on axial. Coverage entire brain. Matching t2_tirm_cor_dark-fluid_fs_2mm.
	<b>t2_fl3d_tra_p2_swi_fast</b>	Angle as per axial T2-ensure whole of head covered.
		Review prior to getting off the table where possible

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<b>CONTRAST MEDIA</b>	Type	Dotarem
	Volume	0.2ml/kg on 3T
	Administration	IV slow hand injection
	Test Bolus	N/A
	Flow Rate	N/A
	Timing	N/A
	Delayed Imaging	N/A

<b>OPTIONAL SEQUENCES</b>	<p>If Dysplasia found, the radiologist may need: t2_tse_sag_p2_Whole Brain</p> <p>Post Contrast: t1_mpr_sag_p2_iso_ Whole Brain centred to midline (Stealth)</p>
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<b>POST PROCESSING</b>	<p>Reformat mprage sequence into 2 other planes at a slice thickness of 1mm</p> <p>Reformat mprage into curved MPR to cover entire brain</p>
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<b>SPECIAL CONSIDERATIONS</b>	<p>Slice thickness, FOV and slice number are dependent on the age of the child. Different protocols for different ages are set up on the scanner.</p> <p>Younger children not being scanned under general anaesthetic may require a parent or guardian in the room. All accompanying people must complete a separate safety questionnaire and go through all safety checks as per the patient.</p> <p>Small children may require to be scanned under General Anaesthetic</p>
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