



CM/SM MRI screening

Protocol settings for VET MR ESAOTE machines

Image from ~ level of the thalamus / corpus callosum to as far caudal as possible.

A transverse localiser is done after the initial scout. 29 seconds ET 18, rep time 340, slices 9, num ac 1, reading and encoding FOV 200, sample nr 192, phases 128, hamming none, slices 9, thickness 8.0, gap 1.8. This allows you to plan the sagittal shots centring on the dorsal spines of the vertebrae . Then the following sequences are done

1) T1 sagittal - these parameters are set up to give a short FOV and therefore greater contrast.

ET 26, Rep time 530 Slices 10, Num Aq 4 Reading FOV 170, encoding FOV 170, Sample # 320, phases 232, Hamming filter low, thickness 4.5, gap 0.4

2) Turbo spin echo (like T2W) sagittal

ET80 rep time 2800, slices 10, num acq 2, reading FIV 200 encoding FOV 200, sample # 256, phases 192, hamming filter non, thickness 4.5, gap 0.4.

3) T1W 3D transverse centring on the C2/C3 disc space or the widest part of the syrinx

ET 16, flip angle 65, rep time 38, n acq 1, reading and encoding FOV 180, 3D 80 sample # 256 3D phases 40, hamming none, aniso 3d (checked), 3d thick 9.1.

The first 2 sequences are ~ 10 minutes long, The 3rd sequence is ~ 4 minutes so the whole process should take ~ 30 minutes.

Optional extra

Additional (quick ~ 30second) transverse localiser images through lateral ventricles at level of the pituitary gland and also through and tympanic bullae - this is so an assessment can be made of ventricular size / symmetry and whether there is material in the middle ear.