Neonatal cranial ultrasound scanning for the pilot feasibility study of whole body cooling for neonatal encephalopathy at Mulago University Hospital

Make space between the baby’s head and the end of the cot so you can move the probe in all directions.

Feel fontanelle, place probe gently on.

Point the marker on the side of the probe to the right side of the baby.

Standard coronal views

- Anterior coronal
  - interhemispheric fissure
  - white matter

- Mid-coronal
  - corpus callosum
  - choroid at foramen of Monro
  - Sylvian fissure (insula)
  - basal ganglia

- Thalamic view at maximum width of the cerebellum
  - Sylvian fissure (insula)
  - thalamus
  - cerebellum
  - lambdoid suture

- Postero-lateral ventricles
  - To show the full length of the choroid plexus

- Posterior to the ventricles
  - white matter
  - interhemispheric fissure
  - lambdoid suture

Scan protocol
1. on admission
2. day 3
3. day 7

Standard sagittal / parasagittal views

- Mid-sagittal view
  - Corpus callosum, 3rd ventricle, 4th ventricle cerebellar vermis

- Parasagittal view 1
  - caudothalamic notch
  - thalamus
  - choroid plexus in ventricle
  - body of cerebellum

- Parasagittal view 2
  - ventricle
  - thalamus
  - medial insula (Sylvian fiss.)

- Parasagittal 3
  - white matter
  - lateral insula (Sylvian fiss.)

Doppler measurements

- Anterior cerebral artery

- Spectra

Always try to be symmetrical
If you see something unusual take an image of it that shows it best in coronal and sagittal views if possible
Always freeze and save the images.

Mid-sagittal view.
Press C to get green box on screen.
Move box over vessel, turn up gain if vessel not seen.
Press PW to get spectra. Remember to change the scale if the spectra do not fit on the graph.