What is a cranial ultrasound?

A cranial ultrasound is an exam performed on infants to evaluate the structures of the brain. Ultrasound cannot scan through bone, so these ultrasounds can only be performed until the infant is about 14 months old. The fontanel or soft spot provides a place where the ultrasound can see inside the skull. Among other reasons, cranial ultrasounds are most commonly performed on premature infants. The blood vessels of these infants are very fragile and therefore, have an increased risk for bleeding. Ultrasound is a safe and easy way to evaluate the tissue and fluid structures in the brain.

How does the ultrasound work?

Ultrasound sends sound waves into the body using a transducer, a hand-held device that sends and receives sound waves. For the exam, the sonographer will apply warm gel to child’s head and place the transducer against their skin to take pictures. When the sound waves reflect back to the transducer from inside the body, an image is created on the screen. Ultrasound does NOT use radiation.

How should I/my child prepare?

- There is no prep for this exam.
- If your child is wearing a hat, corrective helmet, or any other head piece this would need to be removed prior to the exam.
- For children who may not want to sit still, a favorite distraction or comfort item may be helpful. We do have DVD players and movies.

*If you and your child would like a pre-procedure tour please contact Swedish’s dedicated child life specialists at 206-386-6283.
How long will it take?

45 minutes

Why would my doctor order this?

- Typically this exam is done to routinely evaluate the brain of babies that are born premature or before 37 weeks.
- If the infant has had an abnormal increase in head size.
- Any other neurological symptom that the pediatrician may think is could be caused by the brain.

What will happen during the exam?

Your baby will either lay on his/her back on a bed or in your arms. The sonographer will apply a small amount of warm gel onto the soft spot of your baby’s head. Then he/she will gently place the transducer on his/her skin. By changing the angle of the transducer the sonographer will obtain the images of the brain needed for the exam. The exam quick and easy and will not hurt your baby. Most younger infants will sleep through the exam.

How will I get the results?

After all of the images are obtained, they are reviewed by a radiologist who specializes in ultrasound. They will send the results to your child’s doctor who ordered the exam. In some cases, the radiologist may review the preliminary results with you after the exam is over.