

# Hip (Pediatric) Ultrasound Scan

## Purpose

This document provides Ultrasound staff with a best practice guideline to assist them in diagnosing Developmental Dysplasia of the Hip (DDH) in infants.

## Site Applicability

This imaging guideline is applicable to all Ultrasound departments within Lower Mainland Medical Imaging (LMMI) across Fraser Health, Providence Health Care, Provincial Health Services Authority and Vancouver Coastal Health.

## Practice Level

This imaging guideline is applicable to sonographers and radiologists in all Ultrasound departments within LMMI.

## Exceptions

Deviations to these guidelines are permitted to accurately assess the extent and severity of the abnormality based on the pathology present. The technical imaging characteristics of individual patients can preclude certain views and measurements.

## Need to Know

- Hip ultrasound to evaluate infants with an abnormal physical examination of the hip or to screen babies with risk factors for hip dysplasia (breech presentation during third trimester or a family history in a 1st degree relative) is recommended at 6 – 8 week corrected gestational age (CGA) (Eg: Baby born at 38 weeks, the ultrasound should be booked 8-10 weeks from baby's birthday) by the American Academy of Orthopedic Surgeons.
- A requisition with an authorized individual's <sup>1</sup> name and billing number and containing demographic and clinical information is mandatory.
- The appropriate transducers are used for gray scale assessment, color and spectral Doppler analysis.
- Document, evaluate, characterize and measure all abnormal findings.

## Guidelines

- With the baby's hip in the neutral position, scan coronally to show the ileum, the labrum, the acetabulum and the head of the femur in one view.
- Take three images of each hip that will allow the alpha and beta angles to be measured.
- Take transverse views each hip.
- Perform stress views to assess stability<sup>2</sup>. Do not stress infants who are in a Pavlik harness. Do not remove a Pavlik harness unless specifically instructed to do so by an orthopedic surgeon.
- The transducer is cleaned and disinfected as per site specific process.

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<sup>1</sup> physician or nurse practitioner

<sup>2</sup> Stress views may be performed by the sonographer or the radiologist, depending on the policy of the radiologists in each department.

## References

*American Academy of Orthopaedic Surgeons.* (2020). AAOS AUC.

[https://www.orthoguidelines.org/go/auc/default.cfm?auc\\_id=225001&actionxm=Terms](https://www.orthoguidelines.org/go/auc/default.cfm?auc_id=225001&actionxm=Terms)

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