

**Your Imaging Experts** 

# Imaging Recommendations for Pediatric Developmental Dysplasia of the Hip (DDH)

Volume 16, Issue IR01, April 2015



Patrick T. Gartland, MD Grand Traverse Radiologists, P.C.

Early detection of developmental dysplasia of the hip (DDH) allows for simpler and more effective treatment. Ultrasound is a safe and effective technique in evaluating for DDH, but can reveal abnormalities that would resolve spontaneously, without intervention. In the early newborn period there is normal physiologic laxity, which can result in a false positive study. This can lead to unnecessary imaging with the potential for unnecessary treatment and associated costs. The primary treatment complication is avascular necrosis (AVN), which has been reported at less than 10% with Pavlik treatment.

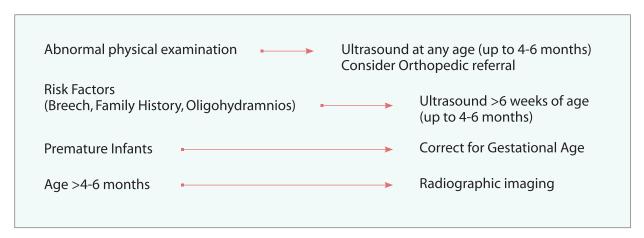




Michael J. Forness, DO

The following guidelines have been established with the goal of early detection balanced with the attempt to avoid unnecessary treatment and the increased costs of repetitive imaging. Ultrasound is the preferred imaging method at up to 4-6 months of age. Beyond 4-6 months of age, radiographic imaging becomes the preferred choice as at this age it is more sensitive as the femoral head ossifies.

Guidelines:



In the northern Michigan region, pediatric hip ultrasounds are performed by Dr. Gartland, Dr. Klegman, and Dr. Shirley. Ultrasounds can be scheduled at 231-935-7200. We are committed to schedule your patients as soon as possible in accordance with the above recommended guidelines. Please feel free to contact Patrick T. Gartland, MD at (pager) 231-318-0356 if you have any questions, concerns, or unique patient requests. Michael J. Forness, DO of Helen DeVos Pediatric Orthopedics is available for consultation if necessary at 616-267-2284.

## References

AIUM Practice Guideline for the Performance of an Ultrasound Examination for Detection and Assessment of Developmental Dysplasia of the Hip. Journal of Ultrasound in Medicine 2013; 32:1307-1317.

Bache CE, Clegg J, Herron M. Risk factors for developmental dysplasia f the hip: ultrasonographic findings in the neonatal period. Journal of Pediatric Orthopedics B 2002; 11:212-218.

Clinical practice guideline: early detection of developmental dysplasia of the hip. Committee on Quality Improvement, Subcommittee on Developmental Dysplasia of the Hip, American Academy of Pediatrics. Pediatrics 2000; 105:896-905.

Starr V and Ha BY. Imaging Update on Developmental Dysplasia of the Hip with the Role of MRI. American Journal of Radiology 2014; 203:1324-1335.

#### **DIAGNOSTIC RADIOLOGY**

Steven Hodges, M.D. Steven Klegman, D.O. C. David Phelps, M.D. Todd Space, M.D.

#### DIAGNOSTIC RADIOLOGY/ CARDIAC CT

Ryan Holmes, M.D. C. Paul Williams, M.D.

#### **BREAST IMAGING**

Deborah Crowe, M.D. Charles Weitz, M.D. Todd Wilson, M.D.

### INTERVENTIONAL/ VASCULAR RADIOLOGY

Frederick Brodeur, M.D. Michelle Lung, M.D. Farhaan Mir, M.D. Edward Walsh, M.D.

# MAGNETIC RESONANCE IMAGING

Daniel Boss, M.D. Jesse Johnson, M.D. Todd Kennell, M.D.

# MUSCULOSKELETAL RADIOLOGY

Patrick Gartland, M.D. James Shirley, M.D.

### NEURORADIOLOGY

L. Nicholas Richmond, M.D. David Steffey, M.D.

