

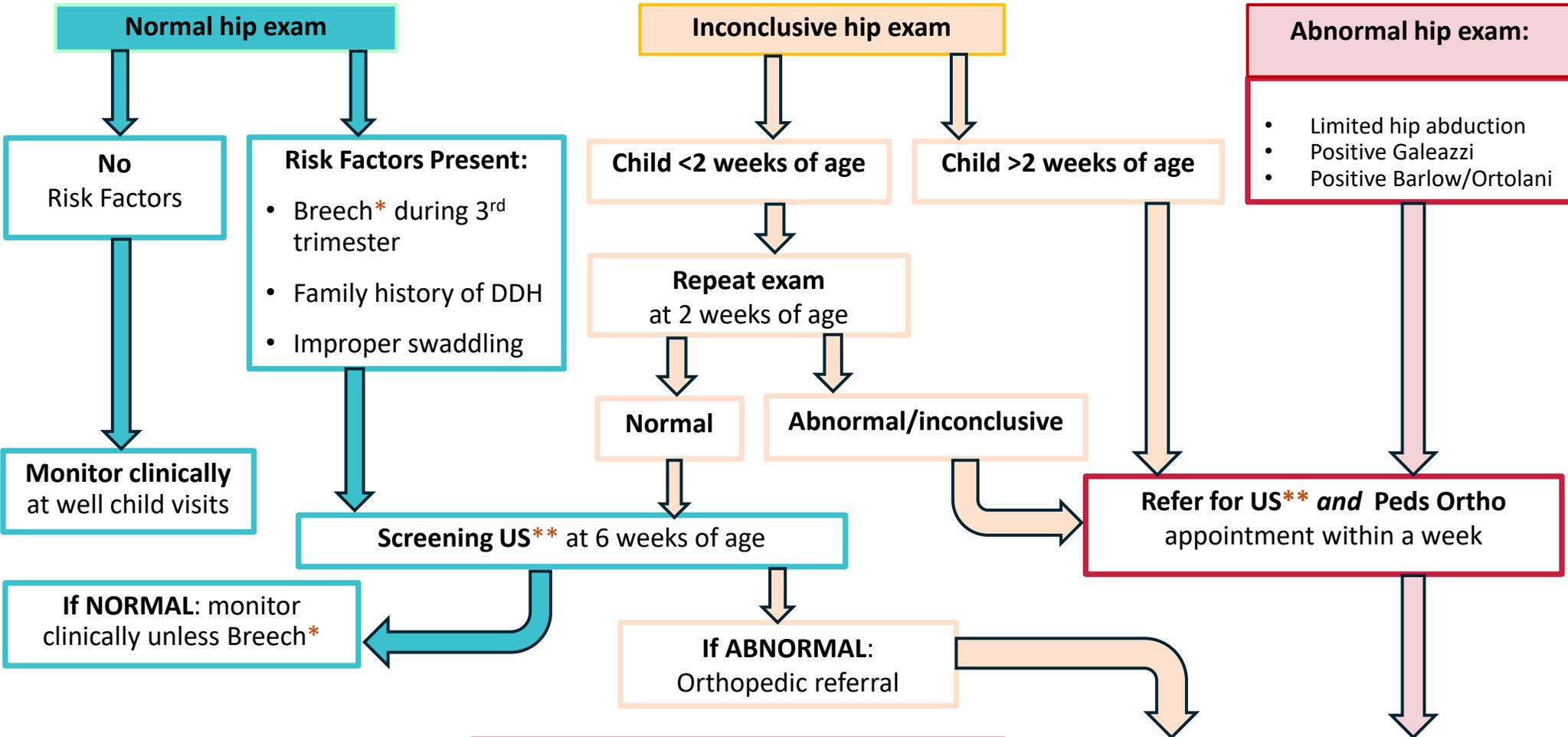
Co-Management Guidelines

To support collaborative care, we have developed guidelines for our community providers to utilize when referring to, and managing patients with, the pediatric specialists at Children’s Wisconsin. These guidelines provide information and recommendations for jointly managing patient cases between community providers and our pediatric specialists. The purpose of this guideline is to determine initial treatment of DDH and when the patient should be referred to orthopedics.

| Diagnosis/Symptoms | Referring provider’s initial evaluation and management: | When to initiate referral/consider refer to Orthopedic Clinic: | What can referring provider send to Orthopedic Clinic? | Specialist’s workup will likely include: |
|--|---|---|--|--|
| <p>Definition: General term for infants with hip instability, dislocation, or shallow socket</p> <p>Risk factors:</p> <ul style="list-style-type: none"> • Female • Breech presentation • Family history of DDH • Inappropriate swaddling: Keeps the legs and hips immobile rather than allowing free movement with the hips flexed and knees bend. During times of greatest laxity (in the first 2-3 months of life) is the most impactful to hip development | <p>Physical Examination Components</p> <p>Infant exam:</p> <ul style="list-style-type: none"> • Hip abduction: Movement of hip away from midline • Ortolani and Barlow maneuvers: Smooth continuous exam. Start with hips flexed and adducted. <ul style="list-style-type: none"> • Ortolani: gentle abduction of hip which reduces a subluxed or dislocated femoral head • Barlow: gentle adducting hip while palpating for the hip to dislocate/sublux • Galeazzi: Leg appears short with hips in flexion <p>Toddler/School age exam:</p> <ul style="list-style-type: none"> • Gait: Assess for abnormal gait such as hyper lordosis through the lumbosacral spine, Trendelenburg gait • Galeazzi • Hip abduction <p>Diagnostic Tests to Order by Age</p> <ul style="list-style-type: none"> • Birth to 6 months: Dynamic hip ultrasound • 6 months and older: AP pelvis X-ray | <p>Any abnormal exam finding:</p> <ul style="list-style-type: none"> • Asymmetric hip abduction or limited hip abduction <60 degrees • +Ortolani, + Barlow, or instability identified with these maneuvers • + Galeazzi (appearance of leg length difference) <p>Any abnormal diagnostic imaging results:</p> <ul style="list-style-type: none"> • Abnormal ultrasound: Alpha angle <60 • Femoral head coverage <50% • Xray with abnormal findings | <p>Internal Provider using Epic:</p> <ul style="list-style-type: none"> • Place Ambulatory Referral to Orthopedics. <p>External Provider using EPIC:</p> <ul style="list-style-type: none"> • Please complete the external referral order to CHW ORTHOPEDIC & SPORTS MEDICINE CLINICS <ul style="list-style-type: none"> - or - • Fax to Central Scheduling at (414-607-5288 <ul style="list-style-type: none"> - or - • Online ambulatory referral form <p>All Providers, please send:</p> <ul style="list-style-type: none"> • Pertinent images – either push to CHW PACS or send with family on disc • Radiologist reports if imaging obtained – send with family or fax to (414) 604-7509 • Clinic notes with hip / lower extremity exam <p>Contact Information</p> <ul style="list-style-type: none"> • Call Physician Consultation Line at (414) 266-2460 if you would like to speak directly to Pediatric orthopedic surgeon prior to referral • Contact Orthopedics (414) 604-7500 for general concerns. | <p>After referral to Ortho Clinic:</p> <ul style="list-style-type: none"> • Clinical exam • Review of images with possibility of additional images ordered, obtained and reviewed during the visit <p>Treatment</p> <ul style="list-style-type: none"> • Birth to 6 months Pavlik Harness, Rhino brace or other abduction brace • >6 -8months likely requires surgical intervention • Pending improvement with bracing; may require open or closed reduction with subsequent spica casting |

Patient Resources: [Hip-Healthy Swaddling - International Hip Dysplasia Institute](#) and [Developmental dysplasia of the hip | Children's Wisconsin](#)
Provider Resources: [Home - International Hip Dysplasia Institute](#)

Infant (0-6 months) Developmental Hip Dysplasia Guideline



Breech Presentation*

- Breech during 3rd trimester is a strong risk factor
- AAOS recommendation:
 1. Screening US at 6 weeks and
 2. AP Pelvis XR at 6 months

Screening Ultrasound**

- Obtain hip ultrasound with manipulation (dynamic) by trained pediatric technician:
- Childrens Wisconsin Imaging locations
- Normal hip US:
 - Alpha angle $\geq 60^\circ$
 - Femoral head coverage $\geq 50\%$

Orthopedic Referral

Children's Wisconsin Orthopedics locations

References

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Developmental Dysplasia of the Hip Guideline

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Medical Disclaimer

This Clinical Practice Guideline (CPG) is designed to provide a framework for evaluation and treatment. It is not intended to establish a protocol for all patients with this condition, nor is it intended to replace a clinician's judgement. Adherence to this CPG is voluntary. Decisions to adopt recommendations from this CPG must be made by the clinician in light of available resources and the individual circumstances of the patient. Medicine is a dynamic science; as research and clinical experience enhance and inform the practice of medicine, changes in treatment protocols and drug therapies are required. The authors have checked with sources believed to be reliable in their effort to provide information that is complete and generally in accord with standards accepted at the time of publication. However, because of the possibility of human error and changes in medical science, neither the authors nor Children's Hospital and Health System, Inc., nor any other party involved in the preparation of this work warrant that the information contained in this work is in every respect accurate or complete, and they are not responsible for any errors in, omissions from, or results obtained from the use of this information.