VALLEY MEDICAL GROUP
Prevention & Medical Care To Help You Live Better, Longer.

Pediatric Pearl *Date: 7/24/23*

Case: A one month old male infant presents as a new patient to your office. Family just moved from out of state. Mom tells you that his previous pediatrician said there was a hip click on the left and to follow this up. On your exam, no hip click detected. What do you do next. Patient was not born breech and does not have a family history.

a) Order an ultrasound
b) Reassure mom; continue to follow
c) Order xray
d) Refer to orthopedics.

Definition: Developmental dysplasia (DDH) is a spectrum of conditions related to abnormal development of the acetabulum and femur leading to instability of the hip joint.

Cause: primarily improper fetal or postnatal positioning, limiting contact between the femoral head and acetabulum, preventing normal growth

How common?: ~ 1% of newborns

Risk factors:
-breech (frank breech confers the highest risk)
-parental or sibling hx of DDH
-improper swaddling that forces that infants hips into extension and adduction (you want the hips to move and the knees to be slightly flexed)
-big baby
-first born
-female
-left side more common than right

What's normal: it is normal to have physiologic laxity during the first few weeks of life. You do not need to ultrasound every time you feel a hip click (not as concerning as a clunk); can monitor on exam at next visit as it often will resolve. If persists at 1 month visit, would recommend ultrasound.

What are the consequences if not found and treated: leg length discrepancy, limp, waddling gait, and reduce range of motion of the hip. Untreated DDH is a major contributor to secondary osteoarthritis in adults. (I recently saw a 12 year old female patient who complained of 1 year of atraumatic left hip pain and intermittent limping and xray showed bilateral DDH, now needs to see orthopedics. She was not followed by us here as an infant or young child.)

Exam: The barlow and ortolani (see video). Only perform one hip at a time. You cannot rely on this beyond 4 months of age (we should remove this from our PEP exam templates beyond the 4 month exam). Also pay attention for asymmetry to thigh or buttock creases, leg length discrepancy, limited abduction.

https://www.google.com/search?q=barlow+ortolani+video&rlz=1C1GCEA_enUS997US997&oq=barlow+ortolani+video&gs_lcrp=EgZjaHJvbWUyBggAEEUYOTIKCAEQABiGAxiKBTIKCAIQABiGAxiKBTIKCAMQABiGAxiKBdIBCDc2MjNqMGo0qAIAsAIA&sourceid=chrome&ie=UTF-8#fpstate=ive&vld=cid:906718f2,vid:Qn-bWuvm0Pk

Imaging:
-with abnormal findings on exam, consider ultrasound by 3-4 weeks of age.
-with normal exam but a significant risk factor such as male or female infant who was breech at 34 or more weeks of gestational age OR first degree relative with DDH, order ultrasound
-4 mo or younger; you are going to order an ultrasound ; > 4 months, you are going to order an xray

Treatment: abduction bracing (the Pavlik harness is most commonly used)

Case Answer: B. With normal exam and no risk factors, his hip click was likely physiologic laxity; no need for imaging.

Please reach out with any questions or comment. Please feel free to share your own input /expertise on this.
Best,
Anna and the Pediatric Committee.