



# Congenital Hip Dysplasia

Sara Paul, M.D., PGY-1  
NYMC Phelps Family  
Medicine Residency Program

# OUTLINE

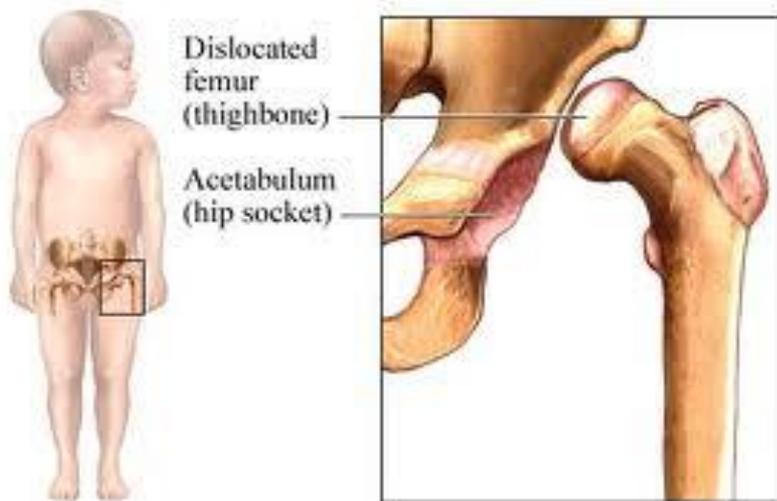


- Case Presentation
- Pathogenesis
- Epidemiology
- Clinical Findings
- Diagnosis
- Treatment

# Case Presentation

- 1 day old female born to G1P1 mother at 39.4 weeks via scheduled cesarean secondary to malpresentation (frank breech)
- Maternal PMH: Non-contributory, uncomplicated pregnancy
- PE: Vitals stable, BW 7lbs 9oz, Apgar 9/9
  - WNL w/ exception of left “hip click” felt during Ortolani maneuver

# PATHOGENESIS



- Abnormal relationship between the proximal femur and acetabulum
- 1 in 1000 births
- At birth both acetabulum and femur are underdeveloped
- If corrected in first days or weeks of life dysplasia is completely reversible

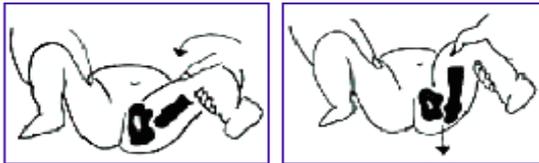
# EPIDEMIOLOGY

Frank breech

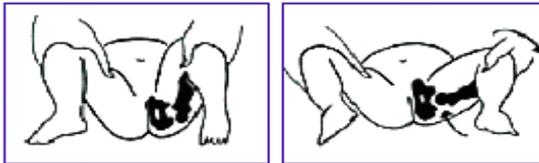


- Increased risk in breech presentation, positive family history, females, first born
- Associated with other anomalies
  - Clubfoot, congenital torticollis, metatarsus adductus, infantile scoliosis

# CLINICAL FINDINGS & DIAGNOSIS



Barlow Test



Ortolani Test



- Newborn
  - Diagnosis depends on demonstrating instability of joint (vs radiograph)
  - Ortolani Test
  - Barlow Test
  - Ultrasound useful but tends towards over diagnosis
  - Asymmetrical skin folds present in ~40% newborns so not helpful

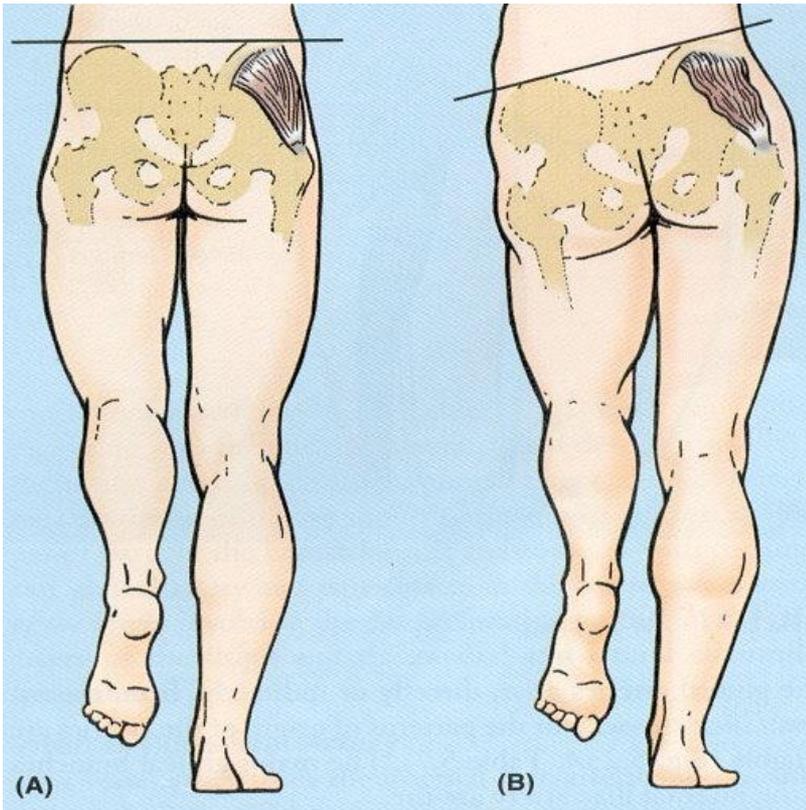
# CLINICAL FINDINGS & DIAGNOSIS continued..



**Galeazzi  
Test**  
Difference  
in  
knee  
height

- Age 1 to 12 months
  - After the first month of life the signs of instability become less evident
    - Contractures develop at hip joint limiting abduction to  $<90$  degrees
  - If abduction incomplete on examination radiographs indicated
  - Galeazzi Test (“Allis Sign”)

# CLINICAL FINDINGS & DIAGNOSIS continued..



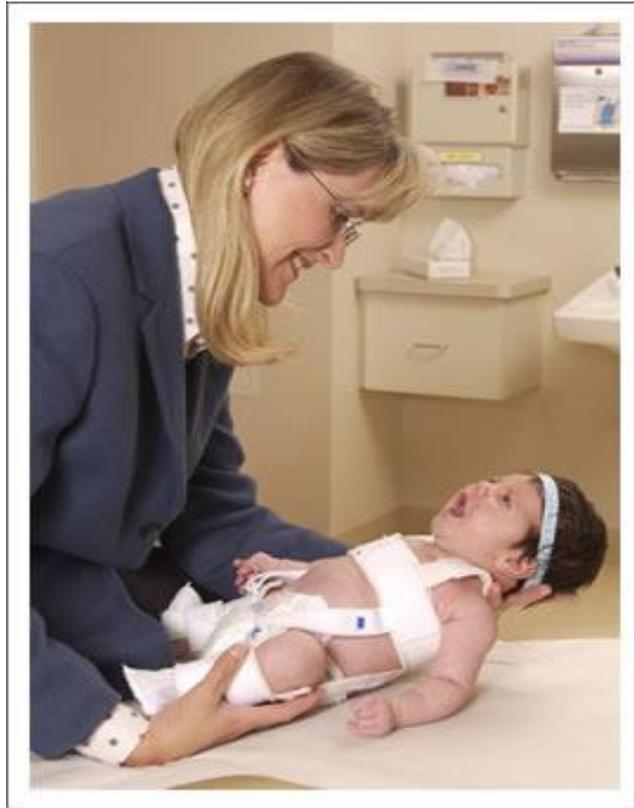
- Older than 1 year
  - If not diagnosed and walking begins, there will be a limp on affected side (painless)
  - Trendelenburg Sign
  - If bilateral the loss of abduction is symmetrical and findings not obvious

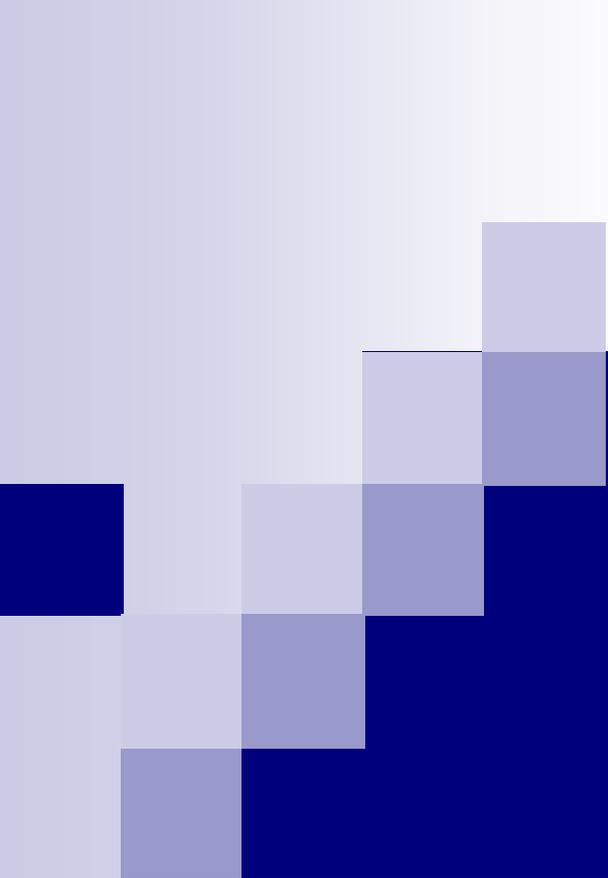
# TREATMENT



- Orthopedic consultation
- Pavlik harness
  - <6 months
  - Maintains reduction by placing hip in flexed and abducted position
- Body casting in older patients
- Surgical reduction or hip reconstruction in unresponsive cases

# Questions/Comments?





THANK YOU!