

# SCREENING FOR DEVELOPMENTAL DYSPLASIA OF THE HIP

Orthopedic Department

# RISK FACTORS

- ❖ *Risk factors:* breech birth, female gender, genetics.
- 1% -10% of infants with risk factors
- 10%-27% of all infants diagnosed with DDH in population-based studies have identified risk factors other than female gender

U.S. Preventive Services Task Force. "Screening for Developmental Dysplasia of the Hip: Recommendation Statement" *Pediatrics*.2006;117:898-902



# SELECTIVE SCREENING OF INFANTS WITH RISK FACTORS

❖ Selective screening: examination, ultrasound, X ray

Exclude selective screening for DDH from the periodic health examination of **high-risk infants** (level II-1 and III evidence)

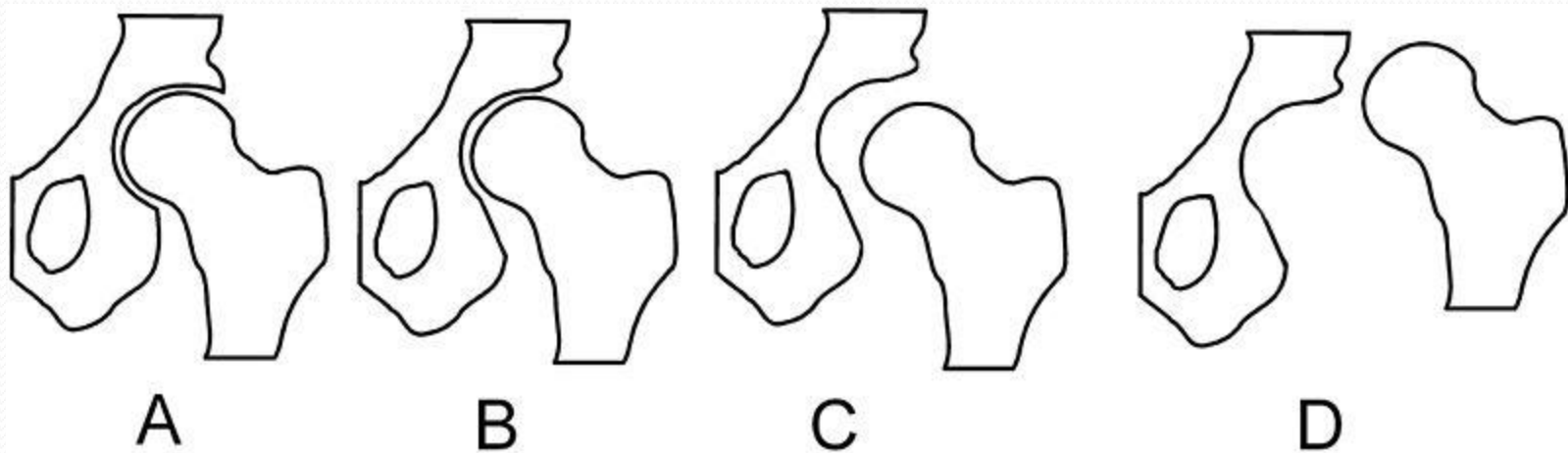
Patel H.” Preventive health care, 2001 update: screening and management of developmental dysplasia of the hip in newborns”.\_CMAJ\_2001 Jun 12;164(12):1669-77

# ULTRASOUND SCREENING

Exclude general ultrasound screening for DDH from the periodic health examination of **infants**

- Shorter D, Hong T, Osborn DA” Screening programmes for developmental dysplasia of the hip in newborn infants: systematic reviews”. Evid Based Child Health 2013 Jan;8(1):11-54
- Patel H.” Preventive health care, 2001 update: screening and management of developmental dysplasia of the hip in newborns”. CMAJ 2001 Jun 12;164(12):1669-77

# Classification of developmental dysplasia of the hip (DDH)



A: Normal. B: Dysplasia. C: Subluxation. D: Luxation

**Instability** – Ability to subluxate or dislocate the hip with passive manipulation

# UNSTABLE HIP

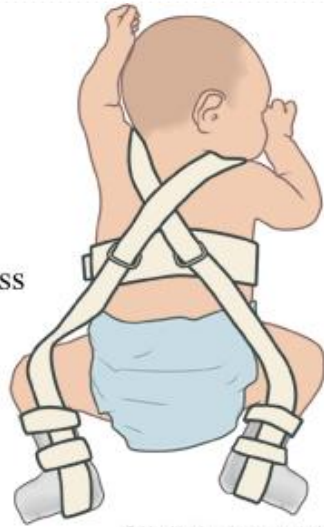
- 60% - 80% of abnormal hips of newborns identified by physical examination resolved spontaneously by 2 to 8 weeks.
- 90% of the hips of newborns with mild dysplasia identified by ultrasound resolved spontaneously between 6 weeks and 6 months.

U.S. Preventive Services Task Force. "Screening for Developmental Dysplasia of the Hip: Recommendation Statement" *Pediatrics*. 2006;117:898-902

# ABDUCTION THERAPY



Pavlik harness



© Healthwise, Incorporated



Short Leg Hip Spica Cast



Denis Browne Bar



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Your Health Info [www.rch.org.au/kidinfo](http://www.rch.org.au/kidinfo)



# UNSTABLE HIP TREATMENT

Insufficient evidence to evaluate the effectiveness of abduction therapy

Shipman S, Helfand M, Nygren P, Bougatsos C. "Screening for Developmental Dysplasia of the Hip: Systematic Evidence Reviews". Agency for Healthcare Research and Quality (US); 2006 Mar.

Patel H." Preventive health care, 2001 update: screening and management of developmental dysplasia of the hip in newborns". CMAJ 2001 Jun 12;164(12):1669-77



# UNSTABLE HIP TREATMENT

Delayed ultrasound and targeted splinting compared to immediate splinting of infants with unstable hips resulted in no significant difference in the rate of late diagnosed DDH

Shorter D, Hong T, Osborn DA” Screening programmes for developmental dysplasia of the hip in newborn infants: systematic reviews”. Evid Based Child Health 2013 Jan;8(1):11-54



**THANK YOU FOR YOUR ATTENTION.  
HAVE A GREAT DAY!**