



SNS COLLEGE OF ALLIED HEALTH SCIENCES
SNS Kalvi Nagar, Coimbatore - 35
Affiliated to Dr MGR Medical University, Chennai

DEPARTMENT : BSC. PHYSICIAN ASSISTANT

COURSE NAME : ORTHOPAEDIC

TOPIC : COXA VARA



COXA VARA



DEFINITION

Coxa vara is a deformity wherein the angle between the neck and the shaft of the femur is reduced to less than 120° .

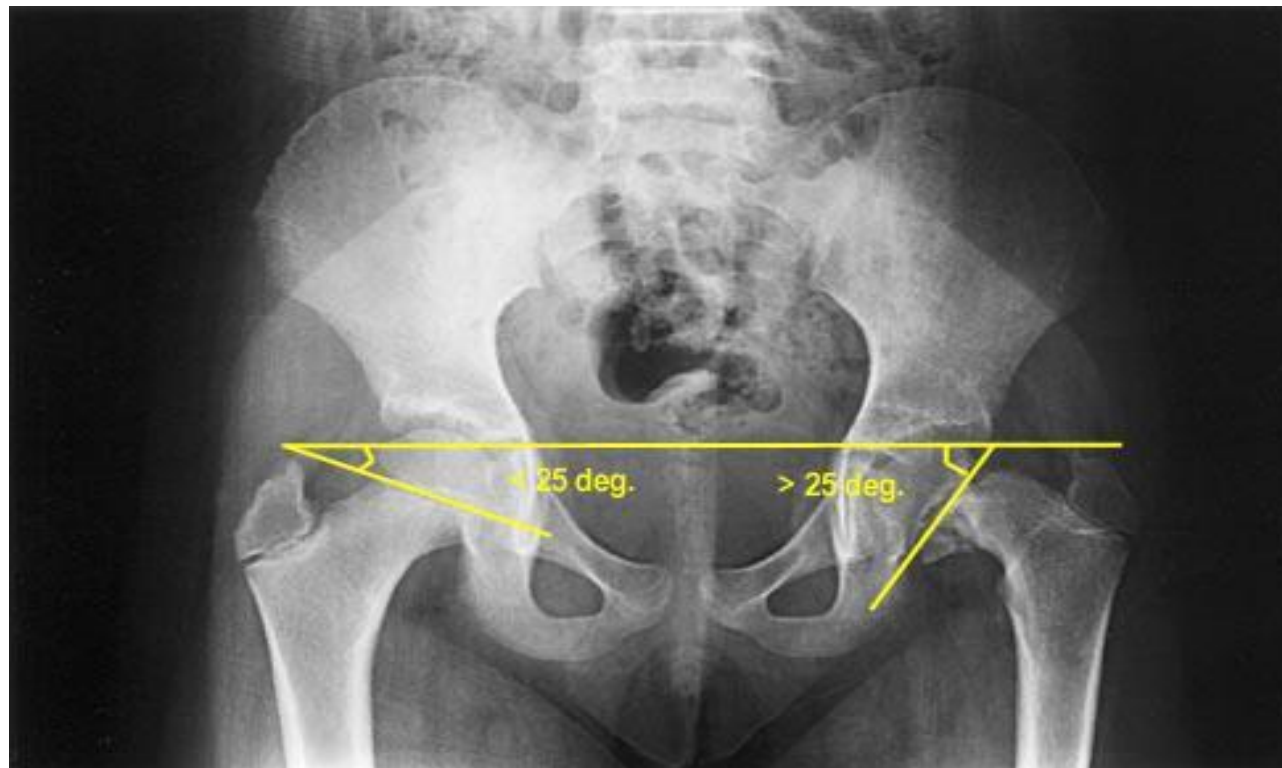
Adults: Angle between 130° and 140°

Children: Angle between 140° and 150°

Reduction of this neck - shaft angle below 120° is called coxa vara.



Coxa vara





Congenital coxa vara:

Congenital coxa vara is a rare condition in which there is a development defect in the medial part of the neck of the femur. It is often bilateral.



Acquired coxa vara

Acquired coxa vara is classified according to the site of the disturbance causing the deformity:

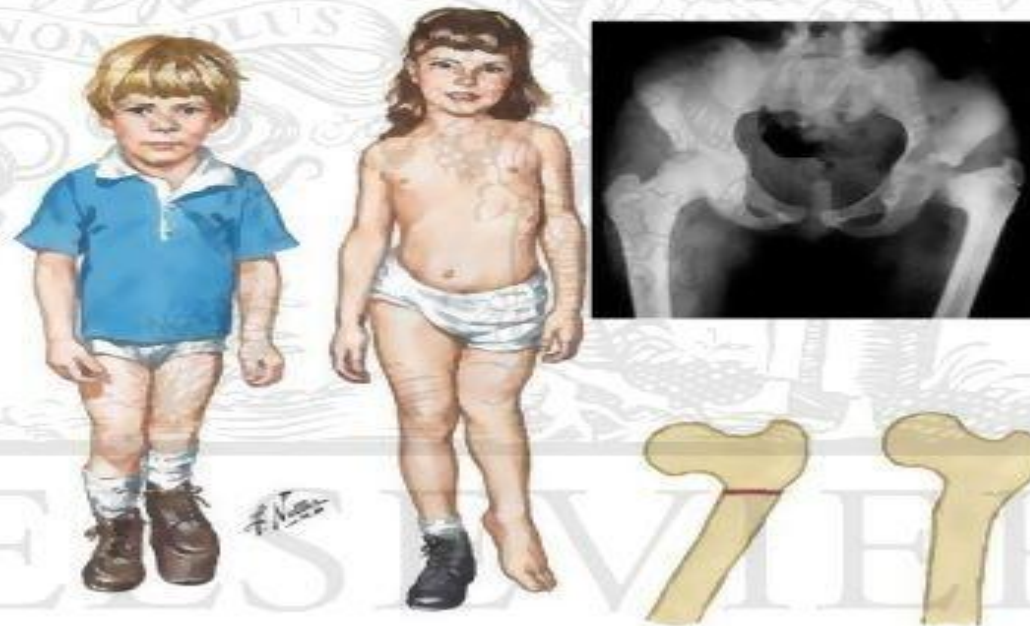
- *Capital coxa vara - perthes disease
 - chondro -osteodystrophy
 - cretinism
- *Epiphyseal coxa vara -slipped upper femoral epiphysis
 - Multiple epiphyseal dysplasia



Cervical coxa vara

Traumatic: malunited trochanteric fracture of femur

Pathological: Rickets, paget disease, fibrous dysplasia



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AETIOLOGY



The exact aetiology is unclear. It commonly occurs in obese children with some hormonal imbalance and retarded sexual development. It occasionally occurs in thin , tall children.



Clinical features



- pain in the leg and/or hip – (the condition can also be painless)
- a one-sided limp or 'waddling walk' that gets progressively worse
- stiffness when trying to move the leg out to the side – for instance, into a 'frog-like' position
- a slight difference in leg length.



Diagnosis

Radiological features:

Antero posterior radiograph shows the separation and slipping down of the epiphysis.

Lateral view is necessary to detect minimal slip and also to show the degrees of slip - mild, moderate and severe

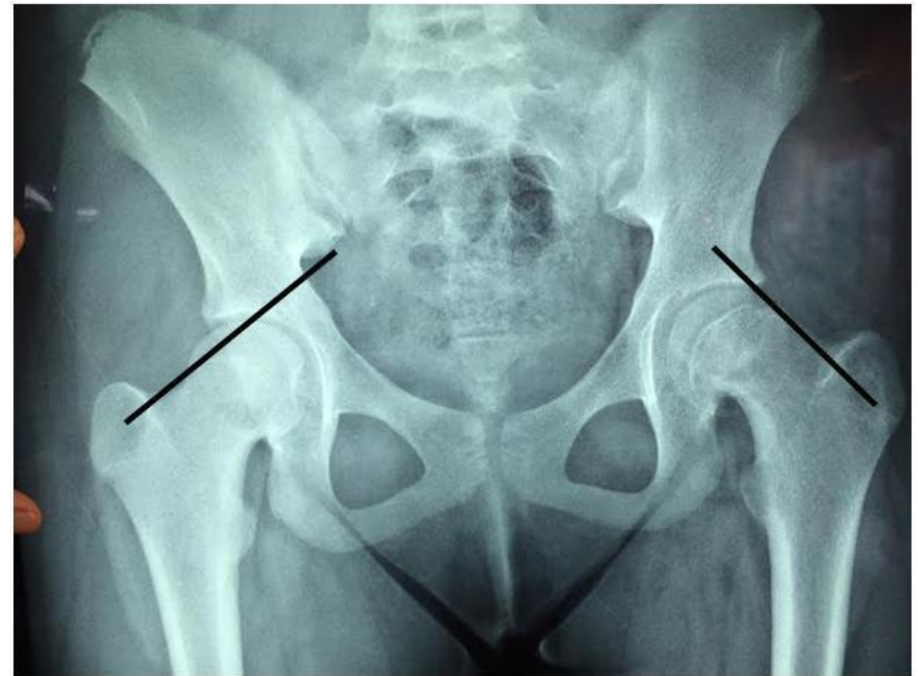
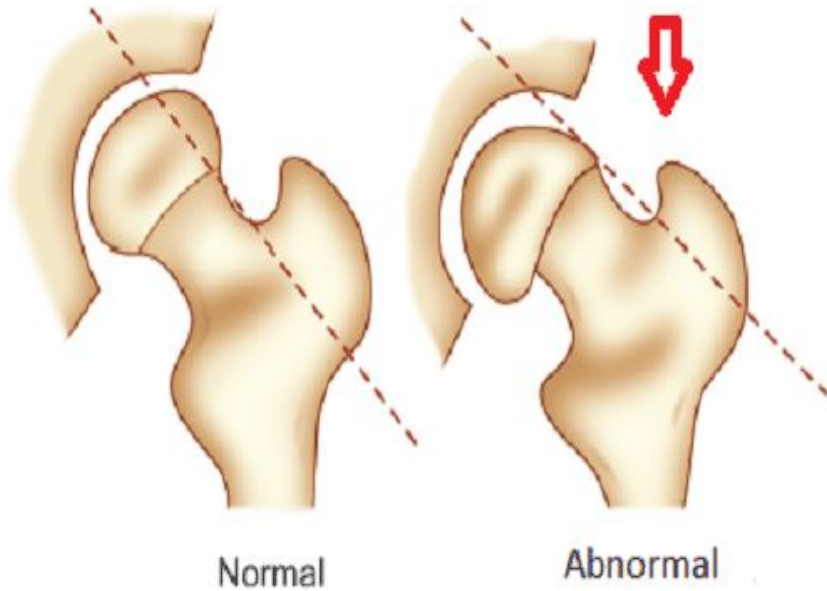
Ct scan is useful to diagnose early slip



- Epiphysiolysis is an early radiographic finding
- Trethowan sign : a line drawn along the upper border of the femoral neck cuts a small segment of the head. In in the case of the downward shift of the head, the head is found below the line. this is called trethowan sign.



TRETHOWAN SIGN





TREATMENT



Mild cases may receive no treatment and follow up checks may be arranged to monitor the hip as it grows.

Surgical treatment

Cervical or intertrochanteric osteotomy :

(shaping of the bone) may be performed to improve the hip joint. Following hip surgery, a child may require some time in a 'hip spica' cast.



Assessment

- 1) what is coxa vara ?
- 2) what is trethowan sign?
- 3) what is it's treatment?



Reference :

Textbook of Orthopaedics and Traumatology

Author:

Mayil vahanan Natarajan



THANK YOU