

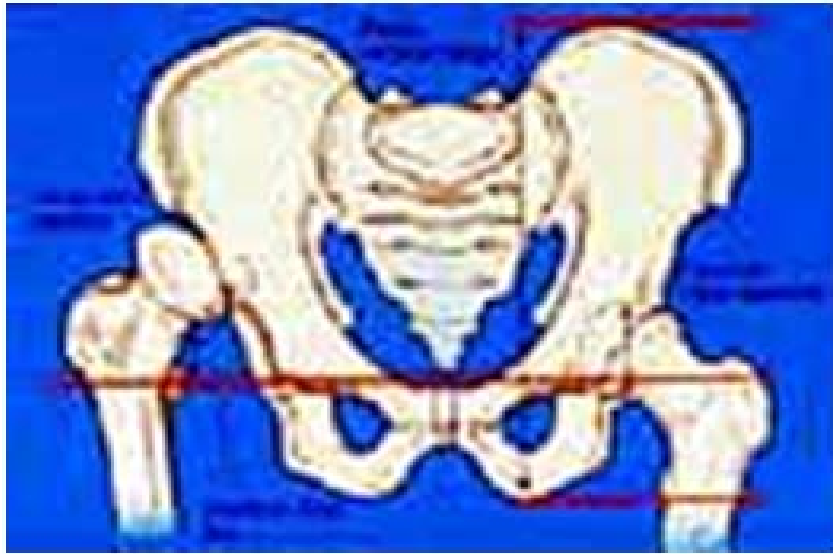
Developmental dysplasia of hip joint

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Orthop .surgery

Definition

DDH----It is abnormal development or •
abnormal formation of the hip joint in
which the femoral head is not stable in
the acetabulum



DDH

- may occur during fetal development or at birth or after birth due to deviation in normal development of infantile growth period .

Instability \longleftrightarrow mal devop.of acetab



Classification

DDH include spectrum of disorders :

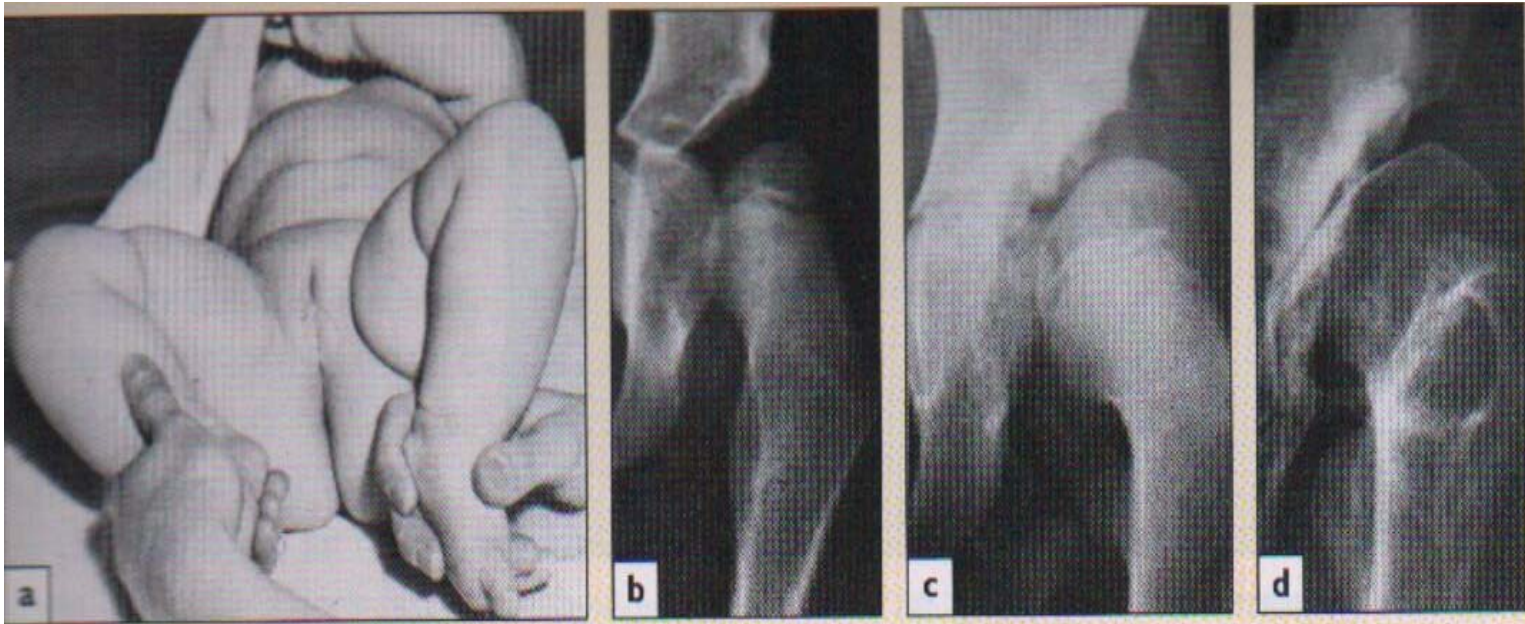
1-Acetabular dysplasia without displacement of femoral head .

2-Hip instability which either :

- subluxation

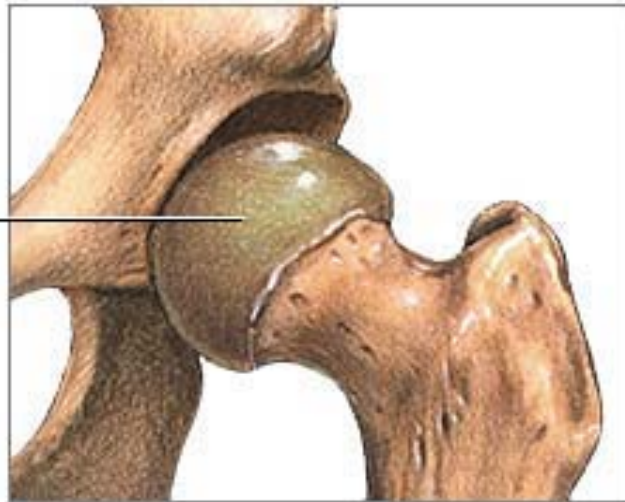
Dislocation---

3-Teratological dislocation.



19.19 Congenital subluxation. (a) The cardinal physical sign in childhood: (b) X-ray in childhood; (c) X-ray in adulthood; (d) X-ray in adulthood.

Dislocated hip

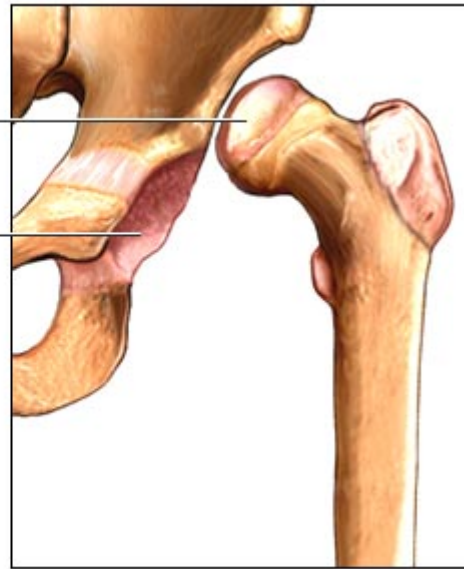


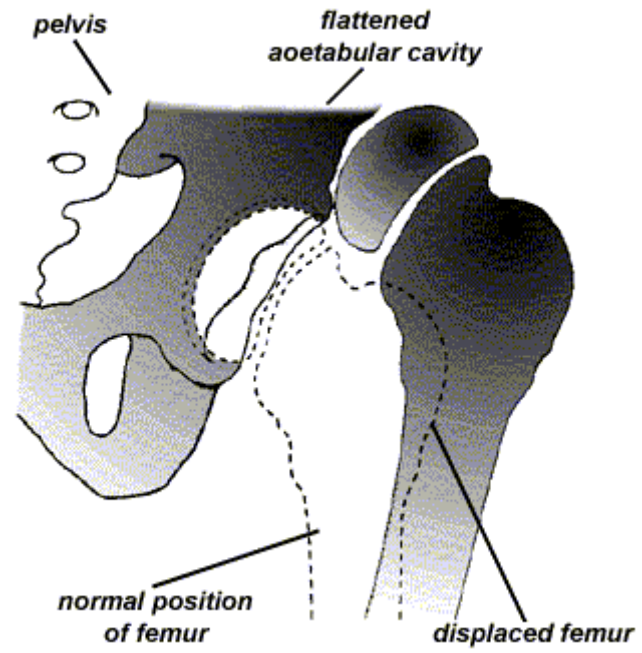




Dislocated
femur
(thighbone)

Acetabulum
(hip socket)





Incidence

Neonatal instability •

----- •

At birth

5 - 20 \ 1000 •

At 3wk

1-2 \ 1000 •

•

female > male 7 : 1 •

Lt > Rt •

bilateral 1 : 5 •

Aetiology

- 1-Exact cause is unknown. ●
- 2-Genetic factor ●
 - it run in families ●
 - it run in population ●
- 3-Hormonal factor . ●
- 4-Intra uterin factors ●
 - mal position ●
 - Larg baby ●
 - oligohydram ●
- 5- Post natal factors . ●

Child at risk

- 1- Female ●
- 2-Breech presentation. ●
- 3-Positive family history . ●
- 4-Other cong anomilies. ●
- 5- First baby. ●

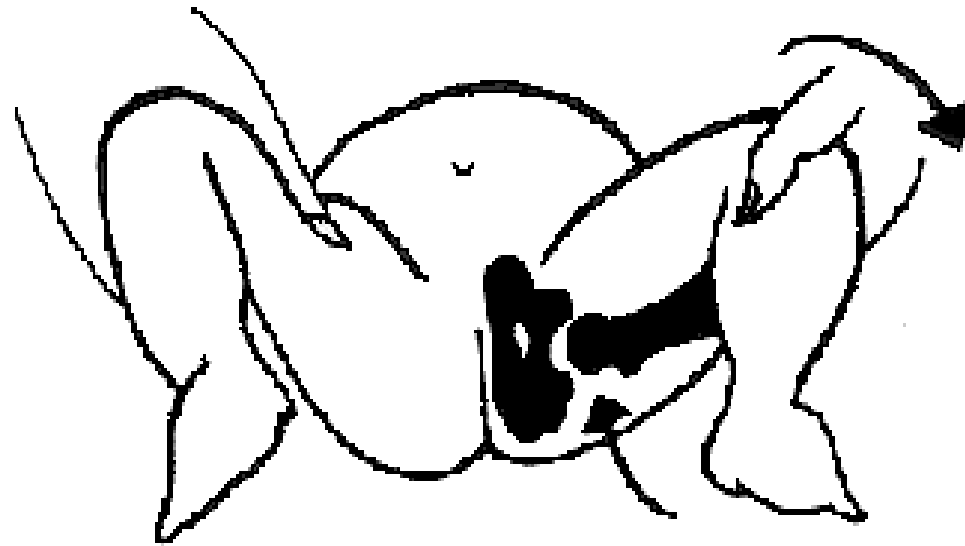
They need extra care and they need frequent re-examination . ●

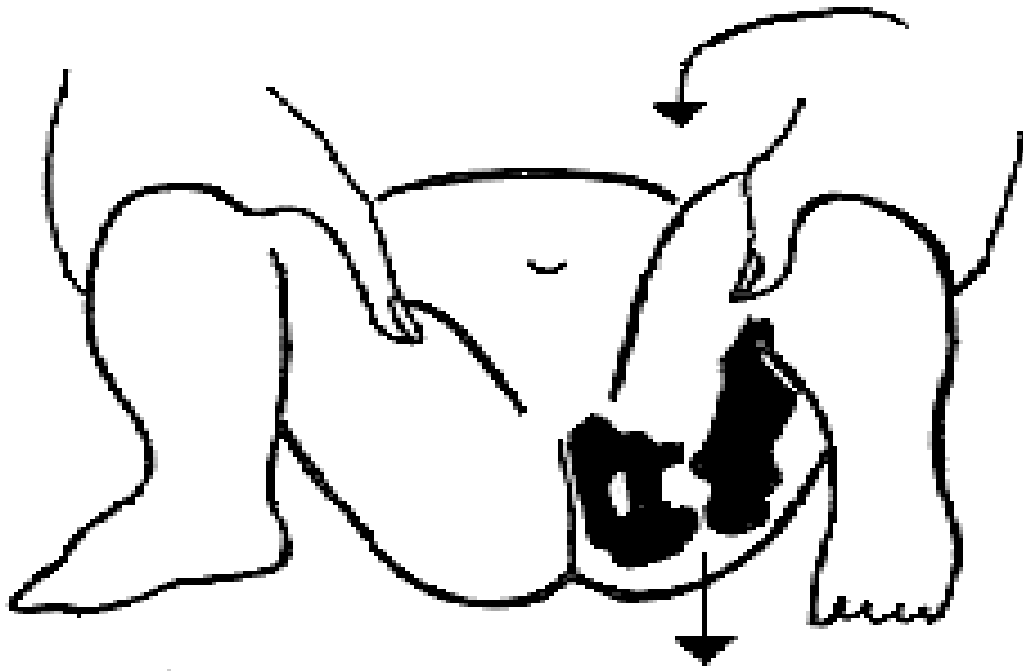
Pathology

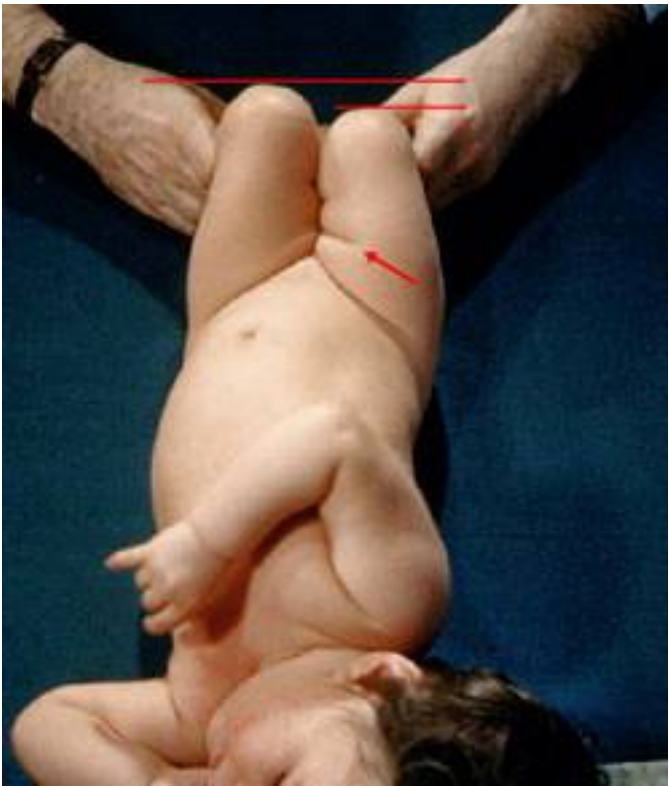
- 1-At birth-----The hip normal in shape but the capsule is stretched and redundant . •

- 2- Infancy-- -----The head dislocated sup-lat. •
 - acetab is shallow and antev •
 - delay app of epiph of head •
 - the head is anteverted •

- 3- At wt bearing-----intensification of all changes above •
 - increase antever of head and acetab •
 - false acetab •
 - hour-glass app. •



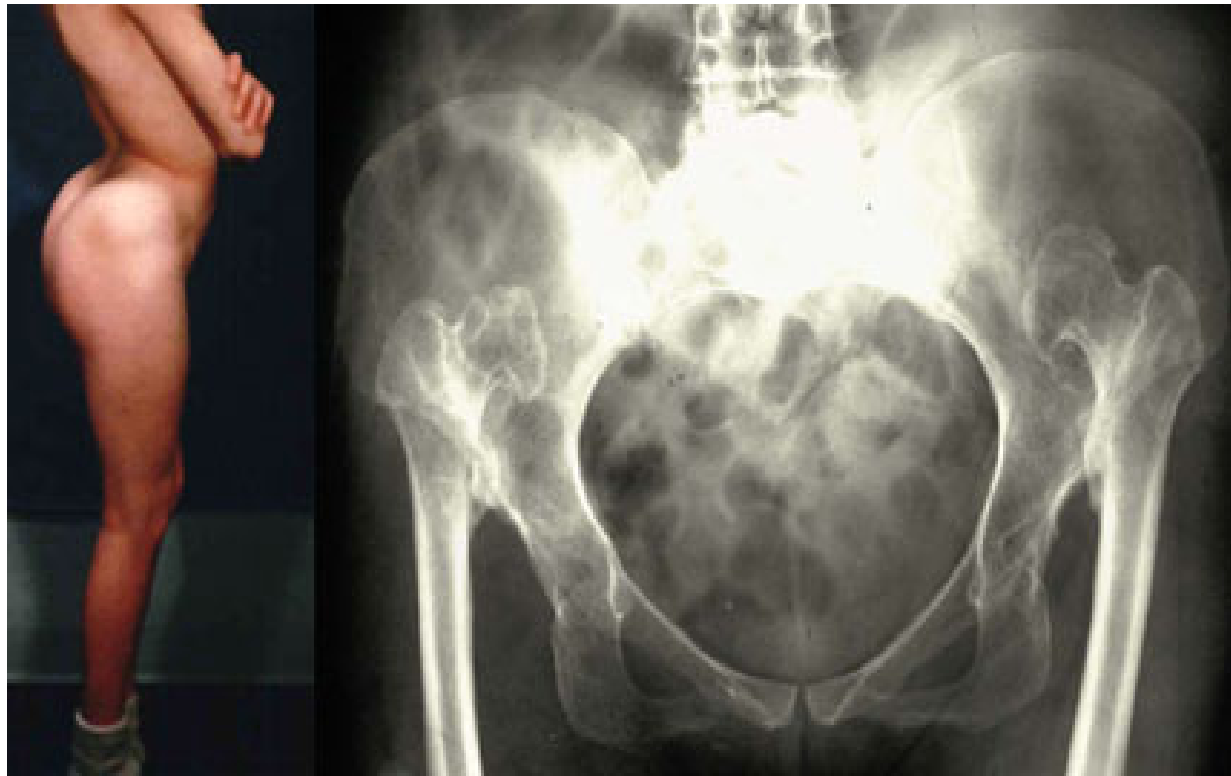






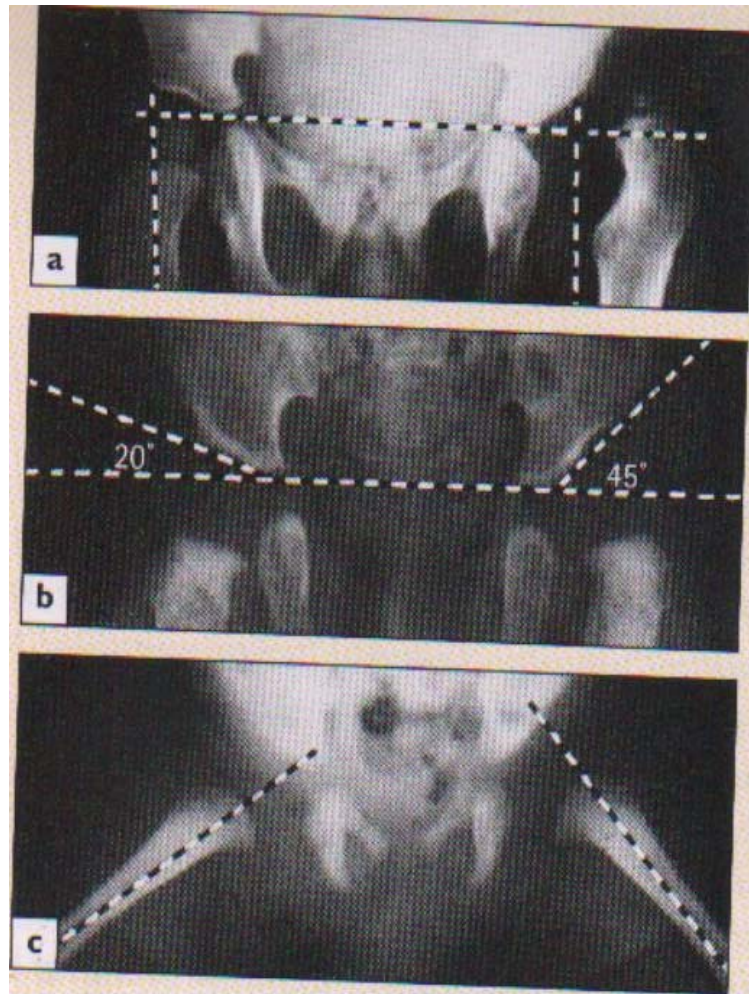




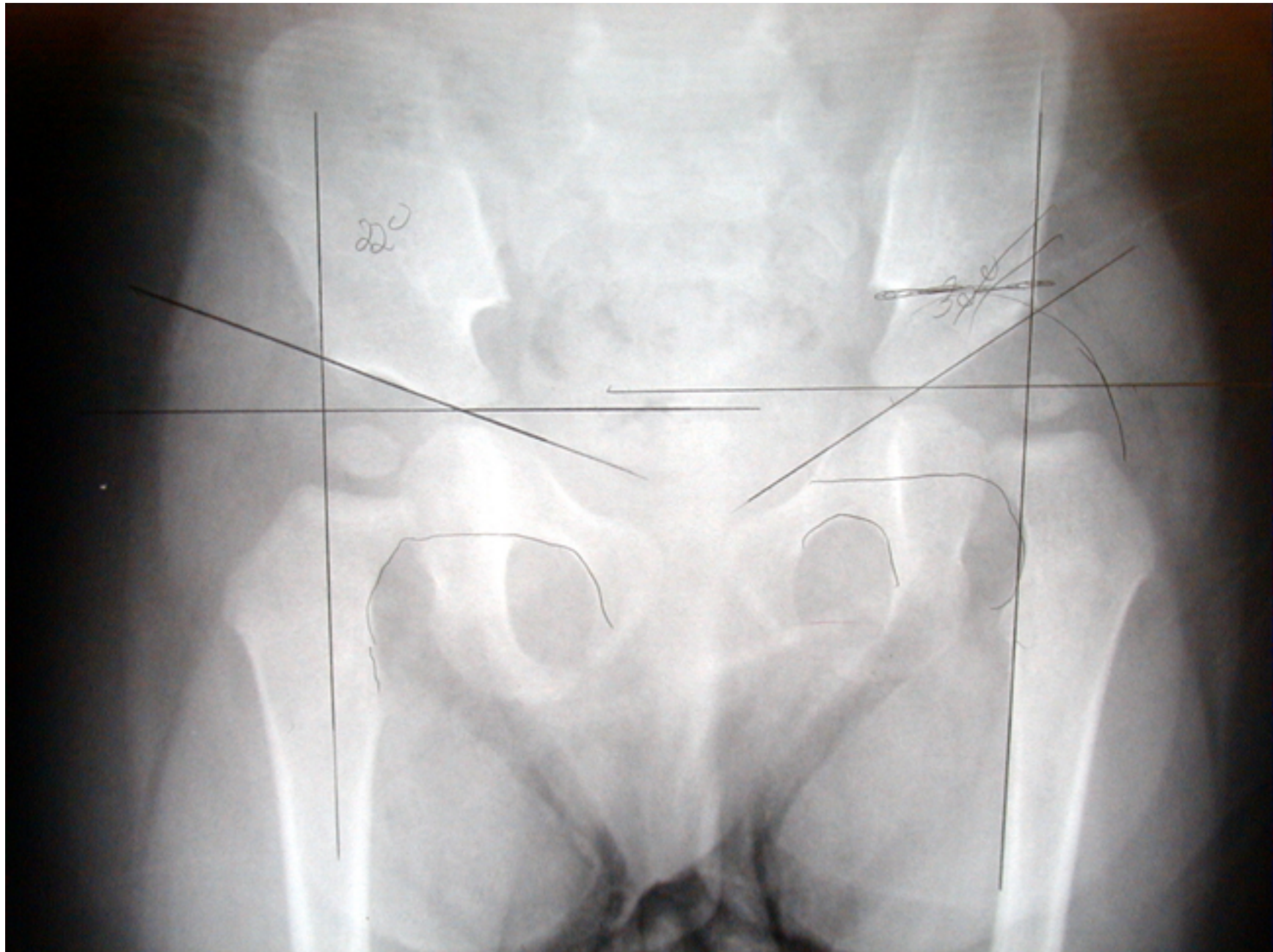


Imaging

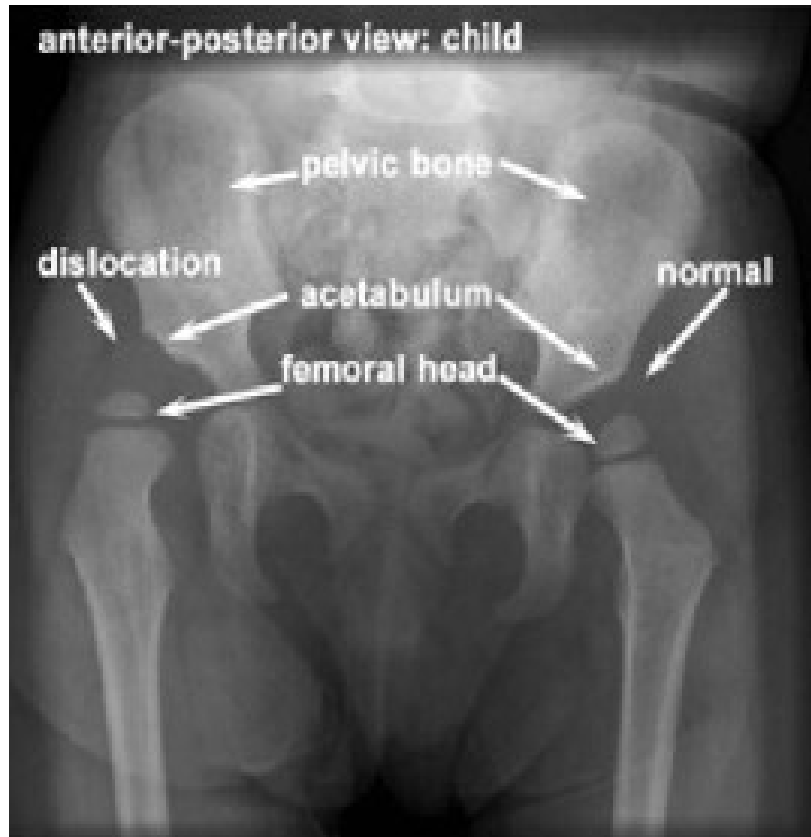
- 1- U/S in the neonatal period
 - Should done for -every child at risk and
 - -every hip with sign of instability
- 2-X-ray signs
 - In neonate Von rosens line
 - In infancy Shentons line
 - Perkins line
 - Acetabular roof angle
 - Smal epiphysis
 - In child hood false acetabulum
- 3- Arthrography
- 4-C.T SCAN



19.1 | Congenital hip dysplasia, *— „

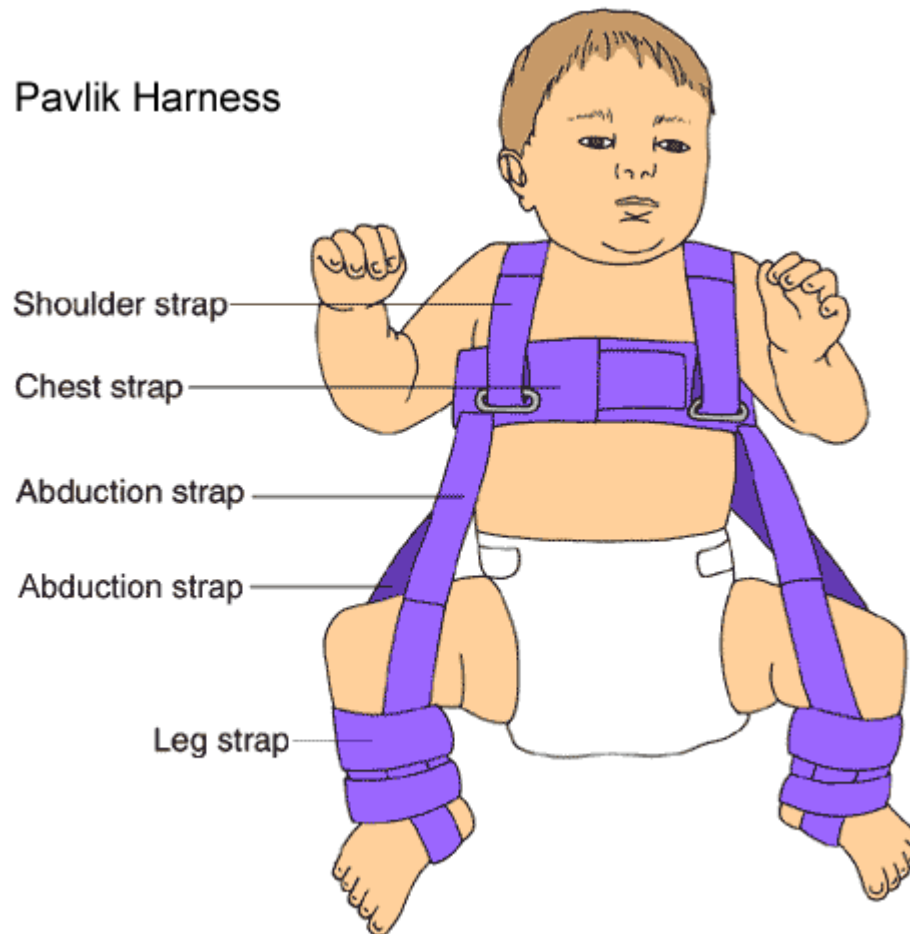


anterior-posterior view: child





Pavlik Harness



Splintage

Objective ---to hold hip flexed and abducted •

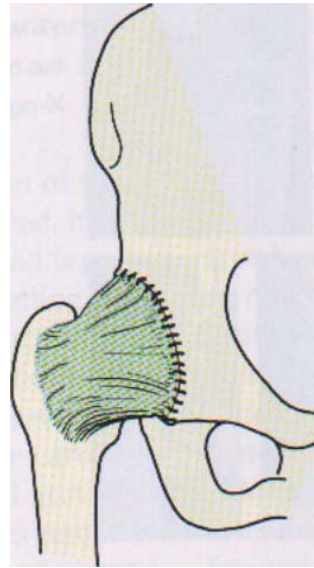
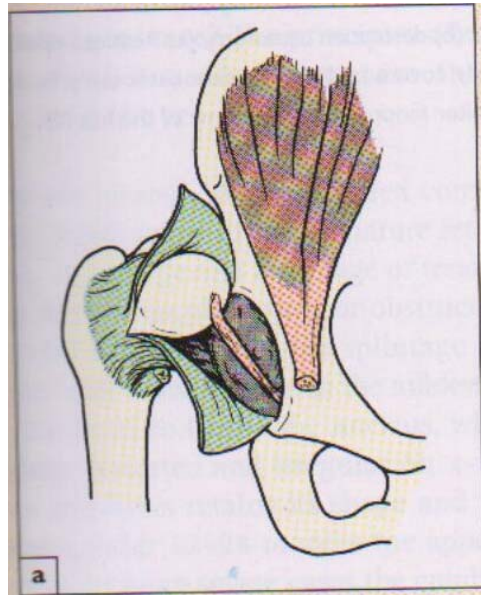
Types ----- Pavlik harness •
Vonrosen splint •
Cast splint •

Golden rules -----proper reduction •
Avoid extreem postion •
Allow slight mov. •

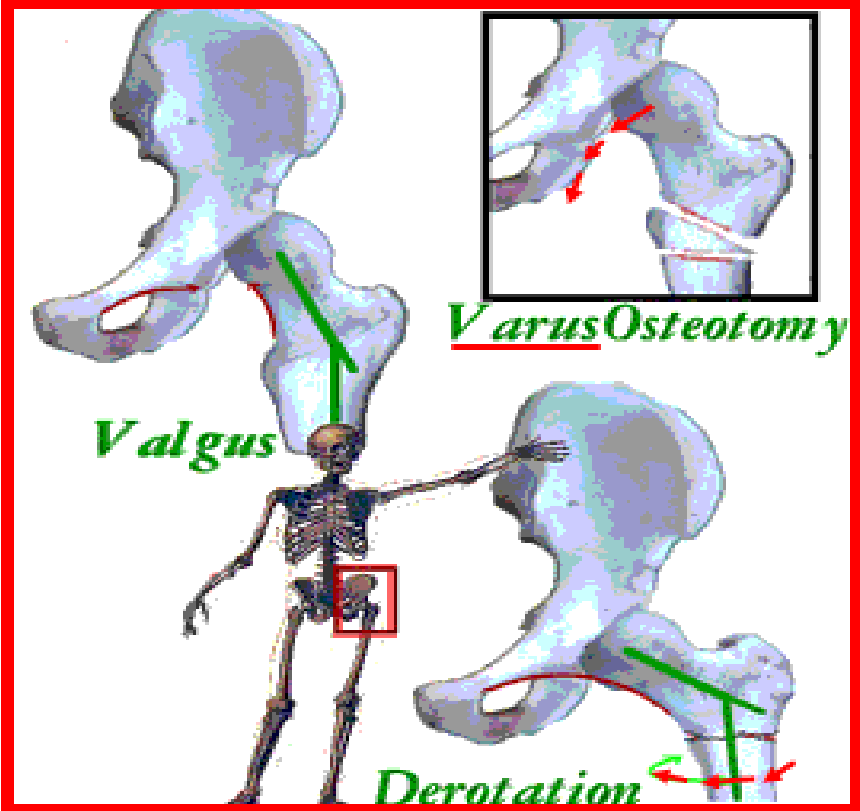


Shout up the
spice diet

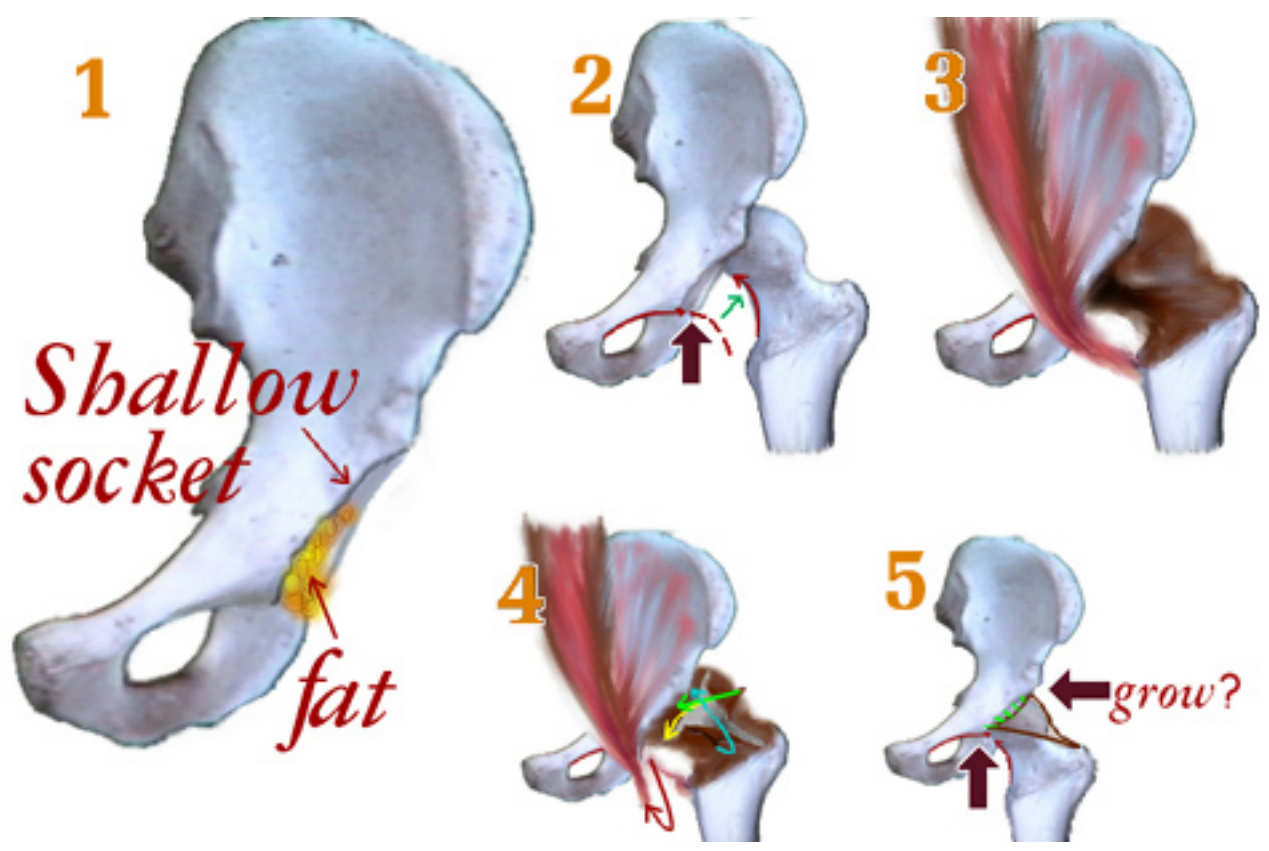




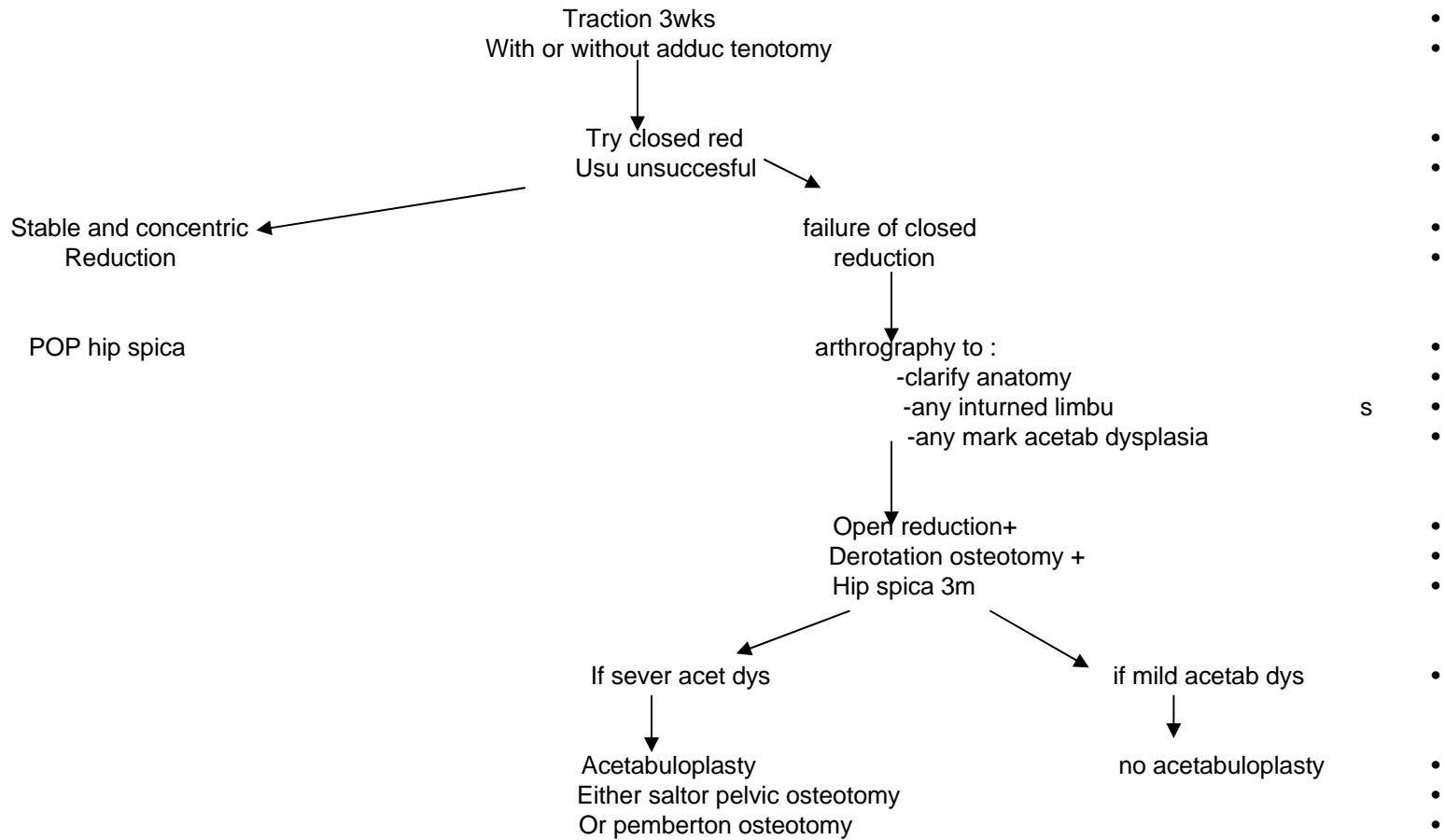


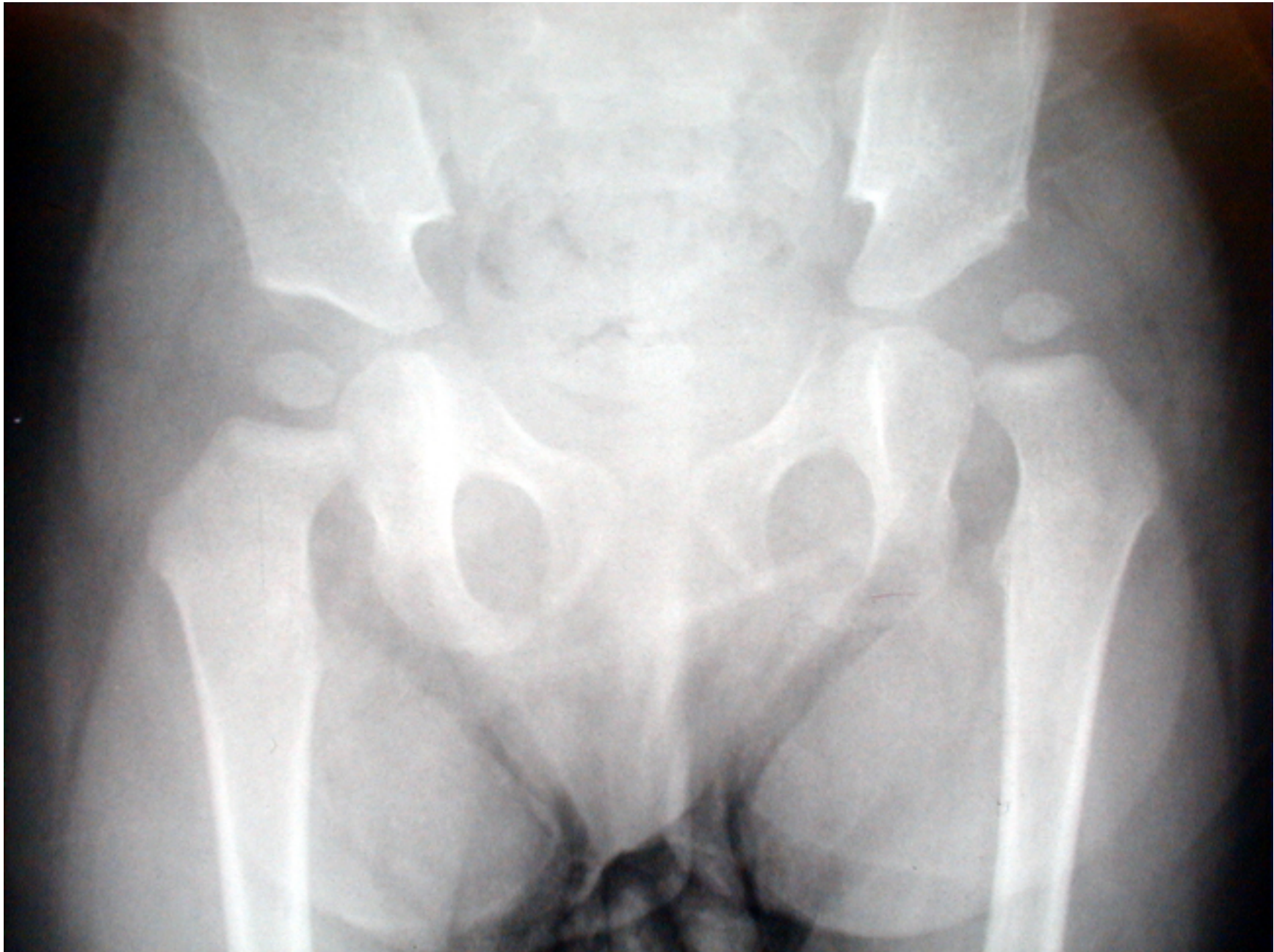






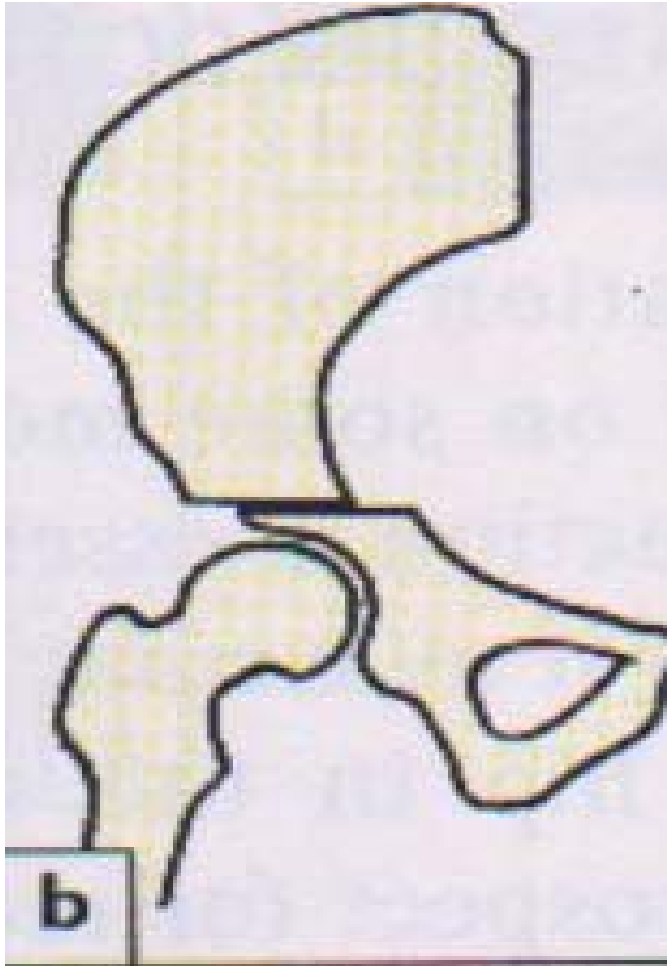
Pt 18m – 4y





Obstacles for close reduction

- 1-Redundent capsule •
- 2-Psoas tendon (hour –glass deformity) •
- 3-Hypertrophic lig. Teres. •
- 4-Inverted limbus. •



Pt > 4y

- If pt 4-8 y +unilat -----OR+derotation •
osteotomy+acetabuloplasty
- If pt 4-8 y +bilat----- no treatment at this •
time
- If pt > 8y -----no treatment •



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