Abnormalities in head shape

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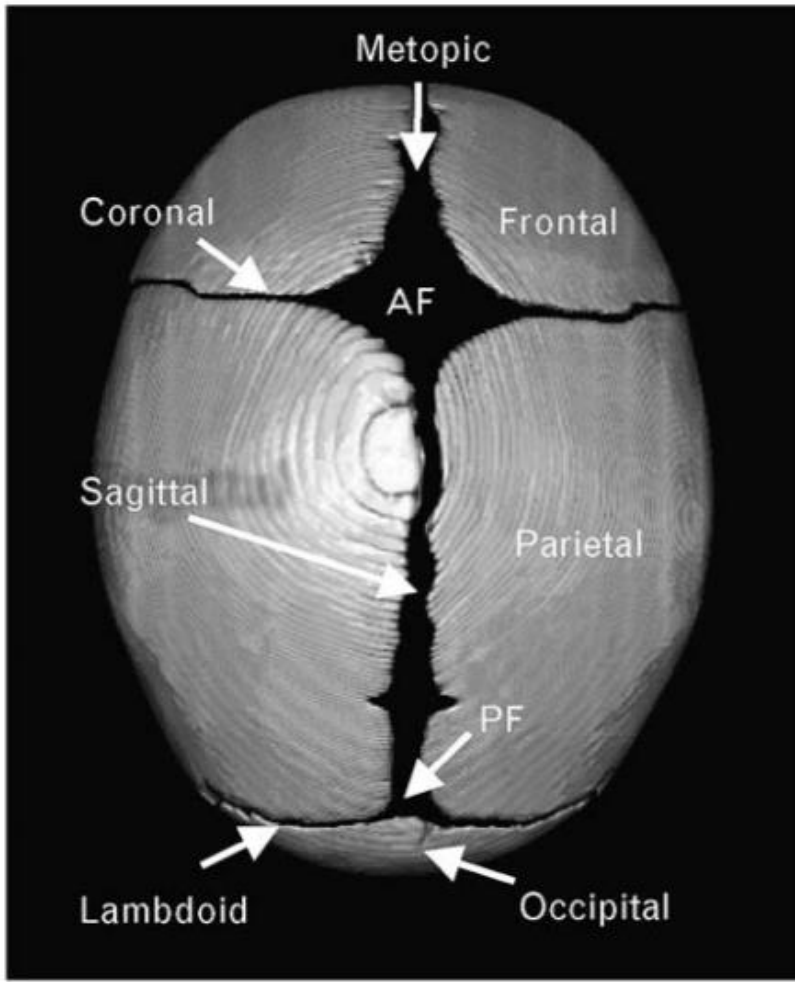
Normal development of infant head



- Natural allowance for brain growth
- Hence brain growth drives size

- PF closes 8-12 weeks
- AF closes 12-24 months

- Metopic suture fuses in infancy (3-9m)
- Other sutures fuse in adulthood

Cunningham, M. L., & Heike, C. L. (2007). Evaluation of the infant with an abnormal skull shape. Current opinion in pediatrics, 19(6), 645-651..

Key history

- What? When? Has it changed?

- Pregnancy history e.g. congenital infection, drug use
- Birth history e.g. preterm, instrumental

- Developmental history

- Family history including consanguinity

Key assessment

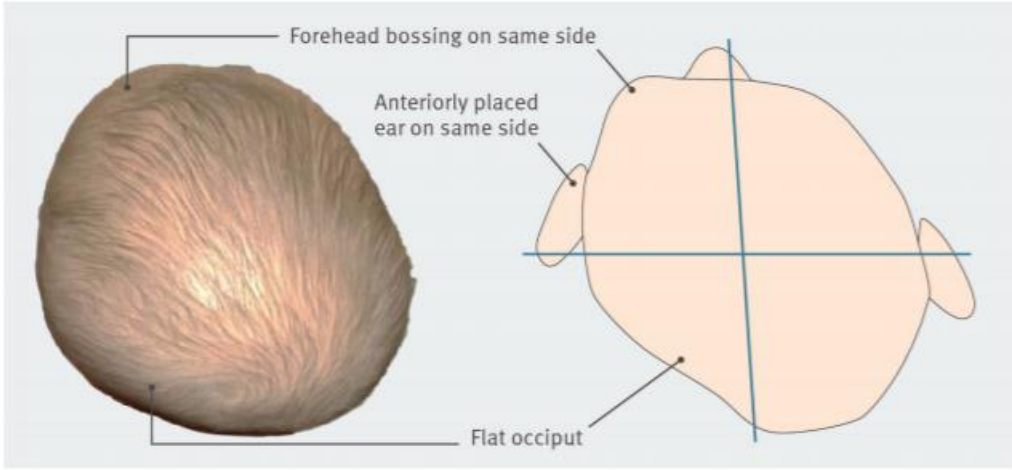
- General examination
  - Dysmorphic features
  - Abnormal neurology
- Examine baby's head
  - Shape
  - Sutures
  - Spaces (i.e. fontanelles)
  - Size: OFC largest of 3, plot on growth chart
- Compare parents' head size/shape

Abnormal head shapes/sizes

- Craniosynostosis = premature fusion of one/more sutures
  - Shape of head subsequently affected
  - Isolated vs syndromic
  - Referral required
- Microcephaly (<2nd centile)
  - Referral required
- Macrocephaly (>98th centile)
  - Referral required

Positional plagiocephaly

- By far most common presentation
  up to 20%
- Features:
  - Flattened occiput on one side
  - Ipsilateral ear & forehead appear displaced anteriorly
- Can be ‘self-fulfilling’
- Seen more since Back to Sleep campaign
- Persists while supine, improves with developmental age
- If severe, can recommend corrective positioning never when asleep
- Helmet use unlikely to be of any practical use



Gatrad, A. R., Solanki, G. A., & Sheikh, A. (2014). Baby with an abnormal head. *BMJ*, *348*, f7609.

Summary

- Be aware of normal features/development
- Positional plagiocephaly is a common presentation – appropriate advice all that is needed
- Refer microcephaly/macrocephaly or suspected craniosynostosis