

QUICK SCREEN FOR INFANT HEAD/FACE/NECK ASYMMETRY

Screen for asymmetry (plagiocephaly) at all clinic visits up to age 1 year. Investigate any asymmetry, intervene early, rule out serious causative factors (craniosynostosis, torticollis), and follow recommendations (conservative treatment, referral).

SYMMETRY

Visualize Alignment

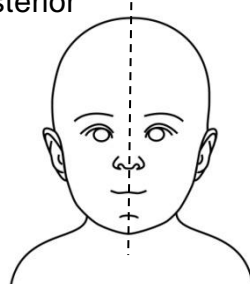
- imagine lines vertical/horizontal, anterior/posterior
- connect landmarks on head/face/neck

Visualize Proportion

- divide skull into quadrants, note if quadrant volumes are relatively equal

Document Asymmetry

- head, face (bossed, flat, misaligned areas)
- neck (head tilt, shoulder hike, face rotation)



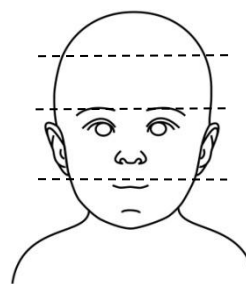
Landmarks:

Anterior

- fontanel
- nose
- chin
- neck

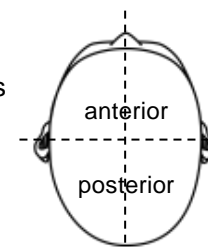
Posterior

- vertex
- fontanel
- occiput
- neck



Landmarks:

- vertex
- forehead
- eyebrows
- eyes
- ears
- cheeks
- chin
- neck



proportional quadrant volumes

Landmarks:

- forehead
- ears
- parietals
- occiput

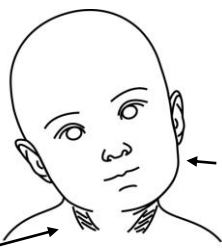
ASYMMETRY

Examples

Torticollis

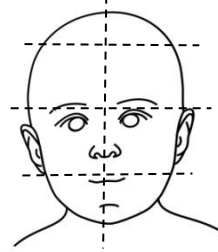
Plagiocephaly

- head tilt
- neck twist
- shoulder hike
- shortened SCM



may involve injury to a neck muscle sternocleidomastoid (SCM) or trapezius

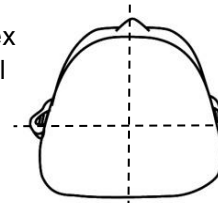
face rotation



chin may deviate from frontal midline

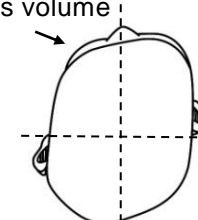
Landmarks:

- misaligned
- uneven vertex
- uneven facial features
- ear shift
- uneven neck



- symmetrical, not proportional
- central occipital flattening
- reduced posterior volumes

flattened, less volume



flattening may cross occipital midline

bossed forehead, orbit, cheek

anterior shift temporal, parietal

flattened, less volume

Conservative Treatment guidelines

1. Counseling/anticipatory guidance: teach parents/caregivers to position baby supine (on back) starting at birth and up to 1 year; to rotate baby's head side to side while supine; to rotate baby's position in crib; and to include daily exercise and tummy time.
2. Mechanical adjustments: for plagiocephaly, follow a 2-3 month trial of positioning, tummy time, exercises, and/or physical therapy.
3. Refer as needed: for torticollis, teach neck exercises or refer for physical therapy; for asymmetry that does not improve or for any concerns, refer to a craniofacial specialist.

Goals: Increase plagiocephaly awareness, screening and intervention, reduce its incidence, and improve infant health outcomes.