EXAMINATION OF THE NEWBORN: REFERRAL PATHWAYS FOR MIDWIVES

- Before starting the examination, ensure the baby fits the criteria for a midwife examination:
  - ≥37+0 weeks gestation and not IUGR
  - Uncomplicated instrumental delivery (max 3 pulls and no change of equipment) or uncomplicated caesarean section (failure to progress and elective section)
  - Not on transitional care anymore

Midwives should refer babies whom they are not able to examine for review by an ANNP, Paediatrician or Neonatologist. This should be clearly documented in the postnatal notes.

	Observation	**Referral Pathway**
Head	• Plot head circumference (OFC) on growth chart if concern about size • Palpate cranial sutures and be aware of possible premature fusion (craniosynostosis) when there is a thickened ridge along a suture line • Observe scalp for moulding, bruising, caput succedaneum, cephalhaematoma, abrasions; bruising increases risk of early jaundice, especially in late preterm infants • Boggy swelling first few hours after ventouse pulls at delivery may be a subgaleal haemorrhage • Torticollis • Skin tags and cysts	• OFC>91st centile or <3rd: *ANNP/Paed* • Suspected craniosynostosis : *ANNP/Paed* • Boggy swelling in first few hours after ventouse delivery: ***immediate ANNP/Paed review*** • Torticollis: *Physio referral* • Skin tags: *Surgical referral* • Cysts: *ANNP/Paed*
Face, neck and clavicles	• Dysmorphic/abnormal appearance • Asymmetry/facial palsy; if the eye on affected side closes normally and baby has a good suck reflex, this will resolve and a referral is not necessary • Skin tags and sinuses	• Dysmorphism: *ANNP/Paed review before discharge unless seen earlier* • Skin tags: *Surgical referral* • Sinuses: *ANNP/Paed*

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Ears	• Isolated pre-auricular pits and small skin tags do not need referral • Symmetry, size and placement	• Multiple skin tags and pits: *Surgical referral* • Asymmetry or abnormal position or size: *ANNP/Paed*
Nose	• Unilateral nasal discharge may indicate narrowing or blockage of the nostril	• Persistent or purulent discharge: *ANNP/Paed*
Mouth and palate	• Palpate and visualise palate with tongue depressor • A small chin (micrognathia) is often associated with a cleft palate so always check • Tongue tie does not need referral for frenulotomy unless interfering with feeding • Gum swellings can interfere with feeding, and larger ones may compromise breathing • Small nodules on the upper gums do not need referral • Natal teeth; check tooth stability as often loose and can be a risk for aspiration	• Cleft palate: *ANNP/Paed* • Gum swellings : ***immediate ANNP/Paed review*** • Natal teeth: *ANNP/Paed*
Eyes	• Size and symmetry • Round pupils • Red reflexes • Ptosis (droopy eyelid) • Bilateral copious purulent conjunctivitis on day 1 may be due to gonococcal infection	• Eyes that appear too small or too large, or asymmetry of eye size: *ANNP/Paed* • Pupil looks abnormal: *ANNP/Paed* • Absent red reflex: *ANNP/Paed* • Ptosis: ANNP/*Paed* • Purulent and copious discharge: ***immediate ANNP/Paed review***
Skin	• Ichthyosis (thickened, cracked skin) • Erythema toxicum and Naevus simplex • Dermal melanosis (slate grey/blue spots). Record exact location of blue spots as they can be mistaken for bruises • Sucking blisters • Skin tags	• Ichthyosis: *ANNP/Paed review* • All rashes/spots and birthmarks not fitting criteria for erythema toxicum, naevus simplex or dermal melanosis: *ANNP/Paed* • All blistering lesions unless certain it is a sucking blister: *ANNP/Paed* • Skin tags: *Surgical referral* •

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Respiratory	• Signs of respiratory distress (tachypnoea, recession, grunting, stridor)	• Respiratory distress: ***immediate ANNP/Paed review***
Heart	• Assess mucous membranes if concern about central cyanosis • Assess rate and rhythm; well term babies can have heart rates 80-90 at rest, but this should rise with crying • Identify any murmurs • Palpate brachial and femoral pulses for equal volume	• Central cyanosis: ***immediate ANNP/Paed review*** • Heart rate <90 bpm and not rising with crying or activity : *ANNP/Paed* • Heart rate >160 bpm at rest, or irregular rhythm: *ANNP/Paed* • Murmurs: *ANNP/Paed* • Weak/absent femoral pulses: ***immediate ANNP/Paed review***
Abdomen	• Umbilical hernia or diastasis recti do not need referral unless greater than 1.5 cm • Excess secretions can be a sign of oesophageal obstruction, and may be associated with polyhydramnios • Ask parent/carer how the baby is feeding and if there has been any vomiting, and if so, what colour. Bilious vomiting can indicate bowel obstruction, with the greatest concern being malrotation/volvulus • Assess for distension. Mild distension is normal in the first 24 h, as long as the abdomen is soft, the baby has passed meconium and is not vomiting • Palpate for masses • Assess anus even if baby has passed meconium, as a recto-vaginal fistula may be missed • Review if baby has passed meconium. As long as there is no vomiting or abdominal distension AND the anus is patent, then it is acceptable to wait 48 hours	• Excess secretions especially with a history of polyhydramnios: ***immediate ANNP/Paed review*** • Bile stained vomiting, or vomiting with a green 'tinge', no matter how small: ***immediate ANNP/Paed review*** • Distension and/or palpable masses: *ANNP/Paed* • Absent anus: ***immediate ANNP/Paed review*** • No meconium at 24 hours: review again at 48 hrs. If going home, ask parents to report to community midwife. No meconium at 48 hours: *ANNP/Paed or Children's ED if discharged*
Abdomen	• Check umbilicus for 3 vessels, any discharge, foul smell or erythema around cord base. Single umbilical artery; no need for review if baby has no other	• Umbilical discharge/ foul smell or erythema around cord: *ANNP/Paed*

	Observation	Referral Pathway
	abnormalities	
Limbs	• Single palmar creases, even if bilateral are not a concern if the baby has no other features of Trisomy 21 • Symmetry of arm movement; if asymmetric, check Moro reflex • Skin tags/ accessory digits/polydactyly • 2-3 toe Syndactyly does not need referral, and neither do familial forms • Ensure feet can be positioned easily into midline if there is a concern about talipes • Talipes equinovarus: Feet are turned inwards and cannot be manipulated to the midline • Talipes calcaneovalgus: Feet are turned outwards and the front of the foot may be against the tibia • Positional talipes: No need for referral; however parents can be shown how to do gentle stretching exercises	• Erbs palsy: *ANNP/Paed* • Skin tags/ accessory digits/polydactyly: *Surgical referral* • Talipes equinovarus and calcaneovalgus: *ANNP/Paed*
Spine	• Assess curvature; suspect scoliosis if the spine is not straight • Lower spine for spinal dimples/sinuses/stigmata/cleft	• Scoliosis: *ANNP/Paed* • Spinal dimples *ANNP/Paed* if: ➢ >2.5cms from anus ➢ >5mm from midline and/or ➢ cannot see blind end, hair tufts, haemangiomas, skin tags or masses/gluteal cleft
Male genitalia	• Ensure meatus is covered with foreskin and penis is straight • Palpate scrotal sac for testes; bilateral undescended and no testes felt in the inguinal canal can indicate ambiguous genitalia • Assess scrotal swellings; hydroceles transilluminate with a pen torch placed on the side of the testicle, and will resolve	• Hypospadias +/-chordee: *ANNP/Paed* • Bilateral undescended testes: ***immediate ANNP/Paed review*** • Unilateral: GP referral

	Observation	Referral Pathway
	• Discoloration of a testicle or any tender swelling could indicate a torsion	• Discoloration of a testicle or any tender swelling: ***immediate ANNP/Paed review***
Female genitalia	• Ensure labia majora are unfused and clitoris covered by labia; an enlarged clitoris, and labia that appear wrinkled may indicate ambiguous genitalia • Do not guess the sex; explain to the parents you would like a senior colleague to review the baby	• Ambiguous genitalia: ***immediate ANNP/Paed review***
Hips	• Ensure legs can be fully abducted, are the same length and have symmetrical skin fold creases when the baby is placed prone • Perform Ortolani to assess for a dislocated hip • Perform Barlow to assess for a dislocatable hip • The 'clunk' of a dislocated/dislocatable hip is felt and heard, as a hip moves into or out of the acetabulum. This is very different to the softer sound of a click due to ligament laxity in a newborn. However, this is very dependent on experience so if in any doubt, request a review	• Refer to Rapid Access Hip Clinic if risk factors present ➢ 1st degree family member with DDH ➢ Breech at or after 36 wks irrespective of presentation at delivery ➢ In multiples, refer both if one is breech • Clicks, positive Ortolani or Barlow, unequal leg lengths or asymmetric creases: *ANNP/Paed*
Neurology	• Assess tone by activity, posture, response to handling and ventral suspension and suck reflex • Check for symmetrical Moro reflex • Abnormal movements ie excessive jitteriness, jerking of limbs, abnormal mouth or eye movements	• Hypotonia/poor suck: ***immediate ANNP/Paed review*** • Asymmetric Moro, consider Erb's Palsy: *ANNP/Paed* • Abnormal movements: ***immediate ANNP/Paed review***