MATERNITY GUIDELINES

Examination of the Newborn

Contents

1. Introduction

Infants are examined soon after birth to identify any obvious visible unexpected features or abnormalities and to reassure parents. The midwife in attendance at the birth usually conducts this initial examination. However, a full examination should be conducted within 72 hours of birth.

2. Initial examination (at birth)

The midwife / clinician will assess the infant's Apgar score at 1 and 5 min (at 10 min if necessary). Additional assistance should be summoned if the infant's condition warrants intervention, e.g. Apgar < 5 at 1 min, Apgar < 7 at 5 min. In the delivery room the head circumference, temperature and birth weight should be measured and recorded. An initial examination must be undertaken, with parental consent, to detect any major physical defect / abnormality.

3. Routine examination of newborn (within 72 hours of birth)

3.1 Training and competencies of staff

The routine examination of newborn infants must be conducted by healthcare professionals who have undertaken specific training for examination of the newborn. Within UHP, this group includes midwives, Newborn Examiner Health Care Assistants (HCA), advanced neonatal nurse practitioners (ANNPs), Enhanced neonatal nurse practitioners (ENNPs) and doctors working within the Neonatal Service.

ALL INFANTS RECEIVING POST-NATAL CARE ON ARGYLL WARD OR CENTRAL DELVERY SUITE ARE ELIGIBLE FOR NEWBORN EXAMINATION BY MIDWIVES OR NEWBORN EXAMINER AS THE INITIAL SCREENING EXAMINATION.

All staff must ensure they fulfil the standards required for their individual practice, undertake at least 40 newborn examinations annually, meet PREP requirements and be registered with the appropriate council / college. In addition, all grades of clinical staff trained in the 'examination of the newborn' must keep up-to-date in their practice as defined in the Maternity Training Needs Analysis.

Please refer to Training Needs Analysis policy for further information.

3.2 Parental consent

Verbal consent for the routine examination of the newborn must be obtained and discussion documented. The parents' opinion of their baby should be sought and discussed throughout the examination and documented

Parents should be advised that the examination is purely a screening examination and cannot always predict or exclude severe congenital abnormalities (particularly cardiac).

3.3 Timing

It is good practice to carry out a detailed examination of the newborn within 24 hours of birth but it can be performed at any time following delivery (there is no minimum time limit). However, this can be done up to 72 hours later.

During the routine examination identified problems must be referred for investigation, specialist assessment and treatment, as well as being fully discussed with the parents. Documentation of the examination must be recorded on the NIPE electronic system and the document printed and filed in the purple 'Postnatal Notes for Baby' on page 18 or on the reverse side of the Baby Information document in infant's buff hospital notes and on page 3 of the Child Health Record (red book).

The maternal notes must be thoroughly reviewed prior to the examination, paying particular attention to any alert stickers (used to highlight any fetal concerns raised by fetal medicine), GBS stickers or any other risk factors highlighted throughout pregnancy.

3.4 The examination

It should include examination of:

- Head
- Neck
- Limbs
- Hands/Feet/Digits
- Chest
- Cardiovascular system (including femoral pulses)
- Respiratory system
- Abdomen
- Male genitalia
- Female genitalia
- Anus
- Groin
- Hips
- Spine
- Central nervous system / Movement/Tone / Behaviour
- Size / Centile
- Skin
- Temperature
- Feeding
- Observations prior to disturbing the baby, i.e. Colour, respiration, behaviour, activity and posture.
- It may be advantageous to listen to the heart when the baby is calm, but this does not preclude later examination if possible.

Undress the baby to complete the remainder of the examination, however ensure environment is draught free and those areas of the baby not being examined are covered.

- Examine the baby head to toe.
- Scalp, head, face, nose, mouth including palate, ears, neck and general symmetry of head and facial features.
- Cardiovascular system – this includes colour, heart rate, rhythm and femoral pulse volume as well as listening to the heart for a murmur. The cardiovascular assessment should also include palpation of the abdomen to identify any organomegaly.
- Respiratory effort can be assessed simultaneously with the cardiovascular assessment and listening to air entry and counting / documenting respiratory rate.
- Abdomen – colour, shape, and palpate to identify any organomegaly. The condition of the umbilical cord can be included at this time.
- Genitalia and Anus – patency of anus is examined. Check genitalia for form and undescended testes in males.
- The femoral pulses can be palpated at this time if not already done.
- Spine – with baby prone inspect for completeness of bony structures and skin, closely observing for sacral pits / tufts of hair.

- Skin – while examining other aspects of the baby any skin lesions or discolouration, e.g. Mongolian blue spots, should be identified and discussed with parents.
- Check eyes with an ophthalmoscope and test for the 'red reflex'.
- The limbs, hands, feet and digits can be examined at this point or left until later, again assessing proportions and symmetry.
- Reflexes – the Moro, grasp, rooting, sucking and ventral suspension reflexes are assessed.
- Hips – historically this examination is undertaken towards the end of the procedure, but hip instability is best felt when the baby is least disturbed. The proportions and symmetry of the limbs and skin folds are examined before checking hip stability. The baby's hips are tested using both the Barlow test and Ortolani's manoeuvres.
- Cry – noting aspects of the baby's cry can indicate possible underlying conditions which require investigation and or treatment.

On completing the examination the baby is re-dressed and offered to the parents for a cuddle, or left comfortable in the cot while the examiner completes the documentation.

3.5 Early discharge or homebirth

Items to be considered if the family goes home before the routine examination can be performed or before the midwife leaves a family following a home birth.

The following should be included in the initial examination:

- Ascertain the family's concerns and give them the chance to discuss them.
- Review the baby's weight and head circumference plot on centile chart in 'red book' and compare with known dates to ensure no gestational or nutritional discrepancies.
- Observe if the baby is able to attach to the breast or suck a bottle, if being artificially fed, and mum is confident handling her baby to feed.
- Consider whether the baby is well enough to be managed at home.
- Ensure no medical / clinical contraindications to early discharge.
- Consider any specific known risks in the baby's home.
- Ensure that any appropriate urgent interventions for the baby have been completed or are planned (e.g. administration of Hepatitis B immunoglobulin and vaccine to the baby).
- Ensure arrangements are in place for the routine examination of the baby to be completed.
- Ensure that the parents know how to assess their baby's general condition and to contact a midwife or doctor if required.
- Parents should be advised that if they have any concerns about their baby they should seek medical assistance, particularly in those infants who are discharged very early. (I.e. less than 6 hours).
- If the mother is rh-ve cord & maternal bloods must be obtained and promptly sent for testing, with results reviewed within 4 hours.

3.6 Medical referral

The following babies must be referred to a doctor / ANNP/ENNP for a further examination as they may require treatment or follow up:

- Abnormalities detected in the antenatal period e.g. dilated ureters
- Babies requiring resuscitative procedures at birth i.e. low Apgar score (<5 at 5 mins) regardless of mode of delivery
- Birth trauma (not for simple cephalhaematoma or caput but to be considered in all other circumstances)
- Any congenital abnormality
- Blood disorders e.g. raised maternal antibody titre
- Known substance misuse
- Known maternal infection, i.e. herpes, GBS, HIV
- Admission to a Neonatal Unit
- Jaundice in the first 24 hours
- Any concerns about baby's health e.g. uncommon / pathological rashes, spots, jittery etc.

The Midwife must refer all babies where a deviation from the normal is noted during the first examination.

- Please refer to Neonatal guidelines for further information.
- Referral forms must be completed fully on the NIPE system, including pertinent clinical information and sent to the appropriate dept. It is the responsibility of the newborn examiner that identifies any problem to ensure the referral is made.
- Parents are given a full explanation of the reason and timescale of the referral.

3.6.1 Medical referral from home

All referrals from home should be discussed by telephone with the Tier II Neonatal Registrar / Senior ANNP on Bleep 0421. If the baby is clinically unwell or a major abnormality is suspected, the referral should be made without delay.

4. Communication and Documentation

- Ensure that the findings of the examination and any referrals made are appropriately recorded in a contemporaneous manner.
- The newborn examiner must confirm the findings in a documented discussion with the parents at the time of the examination or as soon as possible thereafter if an opinion is sought from another professional.
- Ensure those involved in providing future health care to the family, e.g. hospital and community midwives and GPs, receive the relevant information relating to the baby.

5. Final checks prior to discharge from hospital

Ensure documentation of newborn examination is completed with signature and printed name of examiner.

Ensure all vital signs of the infant are stable in normal environmental conditions, i.e. temp proven to be stable without use of overhead heaters or skin-to-skin.

Ensure parents are informed of the important signs and symptoms to look out for and how to contact health professionals should any arise (see purple baby notes) and document that discussion has taken place.

If the mother is rh-ve cord blood results must be obtained prior to discharge from hospital and any abnormalities or concerns escalated to the neonatal team promptly.

6. Documentation and record keeping

It is expected that every episode of care be recorded clearly, in chronological order and as contemporaneously as possible by all healthcare professionals as per Hospital Trust Policy. This is in keeping with standards set by professional colleges, i.e. NMC and RCOG. All entries must have the **date and time** together with **signature and printed name.**

The newborn examination must be recorded on the NIPE electronic system and a printed summary filed on Page 18 of the Purple Postnatal Notes for Baby and in the parent held Personal Child Health Record (‘Red Book’) for every baby. In any circumstance where electronic recording is not possible, the examination must be recorded on page 18 of the Purple notes and in the Child health record. Date and time, signature, printed name and designation must be clearly documented.
Documentation of any further clinical information following the medical referral of an infant must be in the infant hospital buff notes.

Monitoring and Audit

Auditable standards:
Communication of examination with the parents, suitably qualified member of staff performed examination, done within 72 hours of birth. Prompt referral, if appropriate.
Documentation of examination and outcomes
Please refer to audit tool, location: 'Maternity on cl2-file11', Guidelines

Reports to:
Clinical Effectiveness Committee – responsible for action plan and implementation of recommendations from audit
Clinical Governance & Risk Management Committee

Frequency of audit:
Annual, or as new guidance comes into force.

Responsible person:
Ward manager, postnatal care

In addition:
In order to comply with NHS Litigation Authority Risk management standards for Trusts, the following should be included as a minimum requirement.

- Audit of midwives undertaking newborn examination every 3 years.
- Responsibilities for conducting the monitoring/audit will fall to Practice Development Midwife.
- Retrospective audit of midwives undertaking examinations
- Audit to be presented at joint clinical governance / perinatal meeting

Training requirements

Audit of training needs compliance – please refer to TNA policy

Training needs analysis:
Please refer to 'Training Needs Analysis' guideline together with training attendance database for all staff

Cross references

Newborn Examination Guideline (2008), Local guideline, Derriford Hospital, Plymouth
Clinical Guidelines Neonatal Unit Derriford
Antenatal Guideline 31 - Maternity Hand Held Notes, Hospital Records and Record Keeping
Antenatal Guidelines 44 - Guideline development within Maternity Services

References

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NHS Quality Improvement Scotland. (2008). **Best Practice Statement - May 2008: Routine Examination of the Newborn.** Edinburgh: NHS Quality Improvement Scotland.
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Royal College of Anaesthetists, Royal College of Midwives, Royal College of Obstetricians and Gynaecologists, Royal College of Paediatrics and Child Health. (2007). **Safer Childbirth: Minimum Standards for the Organisation and Delivery of Care in Labour.** London: RCOG Press.
NMC (2004) Midwives rules & Standard Nursing and Midwifery Council, London

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