Worcestershire Acute Hospitals NHS Trust

GUIDELINE FOR HIP EXAMINATION IN THE NEWBORN

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Key Documents Owner:	Dr Vivianna Weckemann	Consultant Paediatrician
Approved by:	Paediatric Quality Improvement Meeting	
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Key Amendments

Date	Amendments	Approved by
8/8/19	Change timing of USS to 4-6 weeks	Dr Gallagher Paeds Cons

Note: All newborn babies should have their hips examined before discharge. Please see appendix 1 of this document for the accompanying flow diagram.

Hip Examination

If the hips are **normal** and there are no risk factors the baby can be discharged to the routine screening programme that operates in the community. This involves examination of the hips at 6 weeks by the GP and again at 8 months.

If the hips are **abnormal** on examination, they should be reviewed by a Registrar or Consultant

Abnormal hips fall into one of three categories.

1. ***Dislocated and irreducible***. These hips are out of joint and cannot be brought back into joint by Ortolani manoeuvre (abduction of the flexed hip with pressure on the greater trochanter). Usually abduction is restricted. Such severely abnormal hips are rare. **Refer: Consultant Orthopaedic surgeon Birmingham Children's Hospital**

2. ***Dislocated and reducible***. These hips move back into joint during the Ortolani manoeuvre. The sensation felt by the examiner is often referred to as a "clunk". It represents movement of the femoral head in an antero-medial direction over the edge of, and then back into the acetabulum. It is distinct from a "click". {Clicks can be felt, and often heard, when examining a baby's hips. In clicky hips the femoral head and proximal femur do not move abnormally in relation to the pelvis. Clicks probably arise from tendons and ligaments moving over bony prominences and are of no significance. Clicks can be safely ignored.} **Refer: Consultant Orthopaedic surgeon Birmingham Children's Hospital**

3. ***Dislocatable*.** The femoral head lies within the acetabulum at rest but can be dislocated by the Barlow manoeuvre (Adduction of the flexed hip with pressure on the lesser trochanter). Again the examiner feels a "clunk". This is due to postero-lateral movement of the femoral head. **Refer: Consultant Orthopaedic surgeon Birmingham Children's Hospital**

If you are **uncertain** please get a paediatric registrar or consultant to review the baby. Uncertain means you are unsure as to what you are feeling during the examination. Until you have felt a few "clunking" hips you will be asking a more senior colleague to re-examine quite a few babies. An ultrasound scan at four to six weeks of age is not a substitute for a confident assessment of the hip in the newborn period.

Hip scans are not to be arranged for clicky hips
Babies with abnormal hip examination do not need an urgent USS locally, although one can be arranged, if after examination by the Paediatric Consultant, there remains clinical uncertainty about whether Orthopaedic referral is necessary or not.

Referral is made by letter emailed to dawnstevens2@nhs.net . This should be done promptly upon clinical diagnosis of a hip problem. Remember to send a copy to the GP and the local paediatric consultant's secretary or the local paediatric consultant . It is prudent to ring Mr Baches secretary 0121 333 8099, Mr Gaffey's secretary 01213338097 during working hours to ensure that the referral has arrived safely.

Separate physiotherapy referral, local or BCH, is not required.

There is no need to involve local orthopaedic staff either before nor after discharge.

The baby will be seen in Orthopaedic clinic at BCH within a few weeks of birth and splintage started then if it is necessary.

There is never any need to put a baby in "double nappies".

Risk Factors

If there are **risk factors** present for DDH then an ultrasound scan should be requested at 6 weeks of age. The baby does not need a paediatric follow-up appointment unless there are other concerns. ***The parents should be given a parents information leaflet***. Risk factors are as follows:

Family history of DDH. This means a first degree relative (mum, dad, brother or sister) who required orthopaedic treatment i.e. splint or surgery for DDH. This does not include those relatives who have had clicky hips or were "treated" with double nappies alone. Nor does it include more distant relatives; however a half brother or sister who had DDH would qualify the baby for screening.

Breech presentation. If the baby was a breech presentation at birth, irrespective of gestation, the hips should be scanned at six weeks of age.

If one of a set of twins was a breech presentation both twins should have their hips scanned. Twins both presenting by the vertex do not need hip scans.

Breech presentation corrected by External Cephalic Version or spontaneously at or after 36 weeks gestation should be scanned. Babies who were breech and corrected before 36 weeks to be delivered, at any gestation, by cephalic presentation do not require hip scan.

Preterm infants (born less than 37 weeks gestation) should have hip USS at EDD plus 4 – 6 weeks. So for example a baby born at 35 weeks gestation would have a scan when they are 5+4 to 5+6 weeks of age i.e. 9 to 11 weeks from the day of their birth.

The Hip Ultrasound Scan

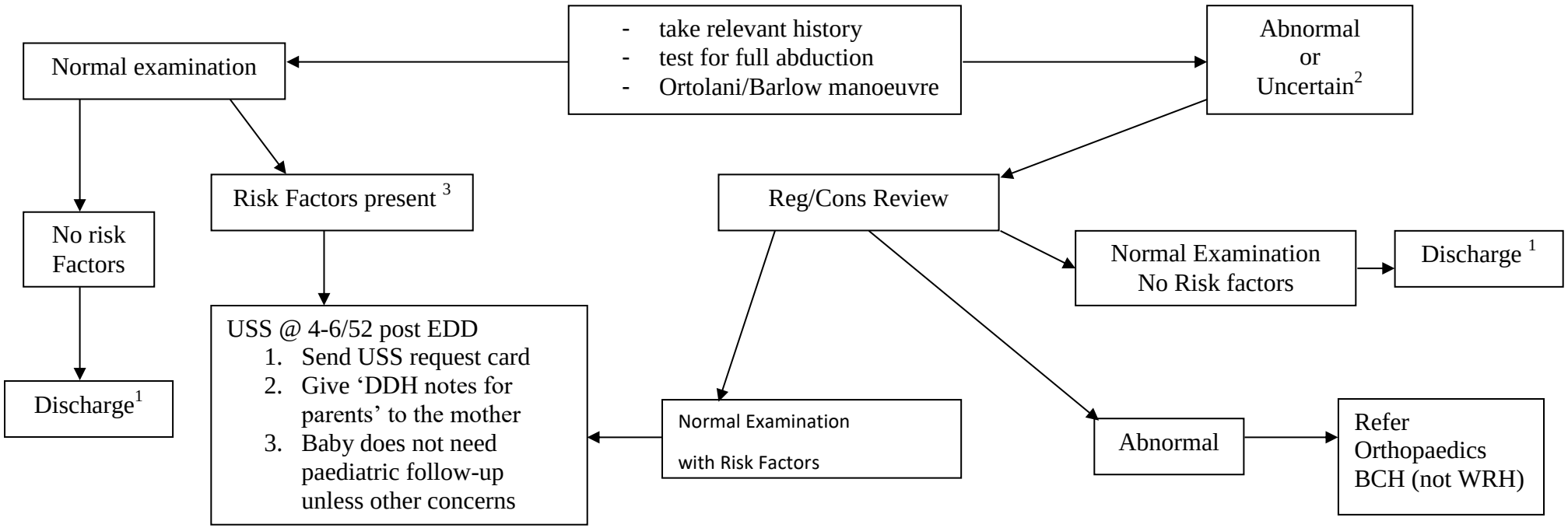
The hip ultrasound scan is done at 4 to 6 weeks of age. The results of the scan are communicated to the parents by the radiographer/radiologist performing the scan and the following action taken:

If the hips are **normal** (sometimes referred to as Graf Type I hips) no further scans will be arranged.

If the one or both acetabulae are **shallow** (shallow hips are sometimes referred to as Graf Type IIa or type IIb hips) they are probably simply immature. A repeat scan is organised by the ultrasonographer in one month. If the hips are then normal no further scans are required. If they are still shallow the paediatric Consultant, upon receipt of the scan result, will refer the baby to an orthopaedic surgeon.

If the hips are clearly **abnormal** (very shallow, dislocatable or dislocated, Graf type IIc, III or IV) the paediatric Consultant, upon receipt of the scan result, will refer the baby to an orthopaedic surgeon.

Appendix 1: GUIDELINE FOR HIP EXAMINATION IN THE NEW BORN



NOTES

[1] Discharge means no further hospital appointment needed but child will require the usual monitoring in primary care setting

[2] Uncertain means you are not sure whether you are feeling a ligamentous 'click' or the 'clunk' of a dislocated or dislocatable hip

[3] Risk factors are:

- Breech presentation at delivery or after 36 weeks (both twins if one was breech)
- Family history means DDH requiring splint or operative treatment in a 1st degree relative (i.e. parent or sibling) not double nappies, not clicky hips

References

Graf R. Fundamentals of Sonographic Diagnosis of Infant Hip Dysplasia. *J Pediatr Orthop* 1984; **4(6):** 735 – 740

Dezateaux C, Godward S. A national survey of screening for congenital dislocation of the hip. *Arch Dis Child* 1996; **74:** 445 –448

Paton RW, Srinivasan MS,Shah B et al. Ultrasound screening for hips at risk of developmental dysplasia – is it worth it ? *J Bone Joint Surg* 1999; **81-B:** 255 – 258

Hansson G, Jacobsen S. Ultrasonography screening for developmental dysplasia of the hip joint. *Acta Paediatr* 1997; **86:** 913 – 915

American Academy of Pediatrics. Clinical practice guideline: Early detection of developmental dysplasia of the hip. *Pediatrics* 2000; **105(4):** 896 – 905

UK national screening committee Programme Statement: Ultrasound Examination of the Hips in Screening for Developmental Dysplasia of the Hips October 2014.

Monitoring Tool

This should include realistic goals, timeframes and measurable outcomes.

How will monitoring be carried out?

Who will monitor compliance with the guideline?

Key control:	Checks to be carried out to confirm compliance with the policy:	How often the check will be carried out:	Responsible for carrying out the check:	Results of check reported to: *(Responsible for also ensuring actions are developed to address any areas of non-compliance)*	Frequency of reporting:
WHAT?	**HOW?**	**WHEN?**	**WHO?**	**WHERE?**	**WHEN?**
Clinical coding look for babies who have no scan booked and pass notes back to Paediatric department		Every baby	Checks are an informal process. Missed scans are very rare	Paediatric Consultants	As cases arise
Audit of hip scans	Notes review	As required	Paediatric dept	Audit meetings	As audits are completed

Contribution List

Key individuals involved in developing the document

Name	Designation
Dr A Gallagher	Consultant Paediatrician

Circulated to the following individuals for comments

Name	Designation
Dr A Short	Consultant Paediatrician, WRH
Dr D.Castling	Consultant Paediatrician, WRH
Dr G Frost,	Consultant Paediatrician, WRH
Dr M Hanlon	Consultant Paediatrician, WRH
Dr C Close	Consultant Paediatrician, ALEX
Dr K Nathavitharana	Consultant Paediatrician, ALEX
Dr S Ghazi	Consultant Paediatrician, ALEX
Dr N Ahmad	Consultant Paediatrician, ALEX
J Flemming	Acting Ward 1 Manager, ALEX
D Picken	Modern Matron Paediatrics, WRH
J Pearson	Staff nurse Riverbank Ward, WRH

Circulated to the following CD's/Heads of dept for comments from their directorates / departments

Name	Directorate / Department
Dr J.Scanlon	Clinical Director, WRH
V Bullock	Manager, Neonatal Unit, WRH & ALEX
C Bowers	Practice Development Sister, WRH