



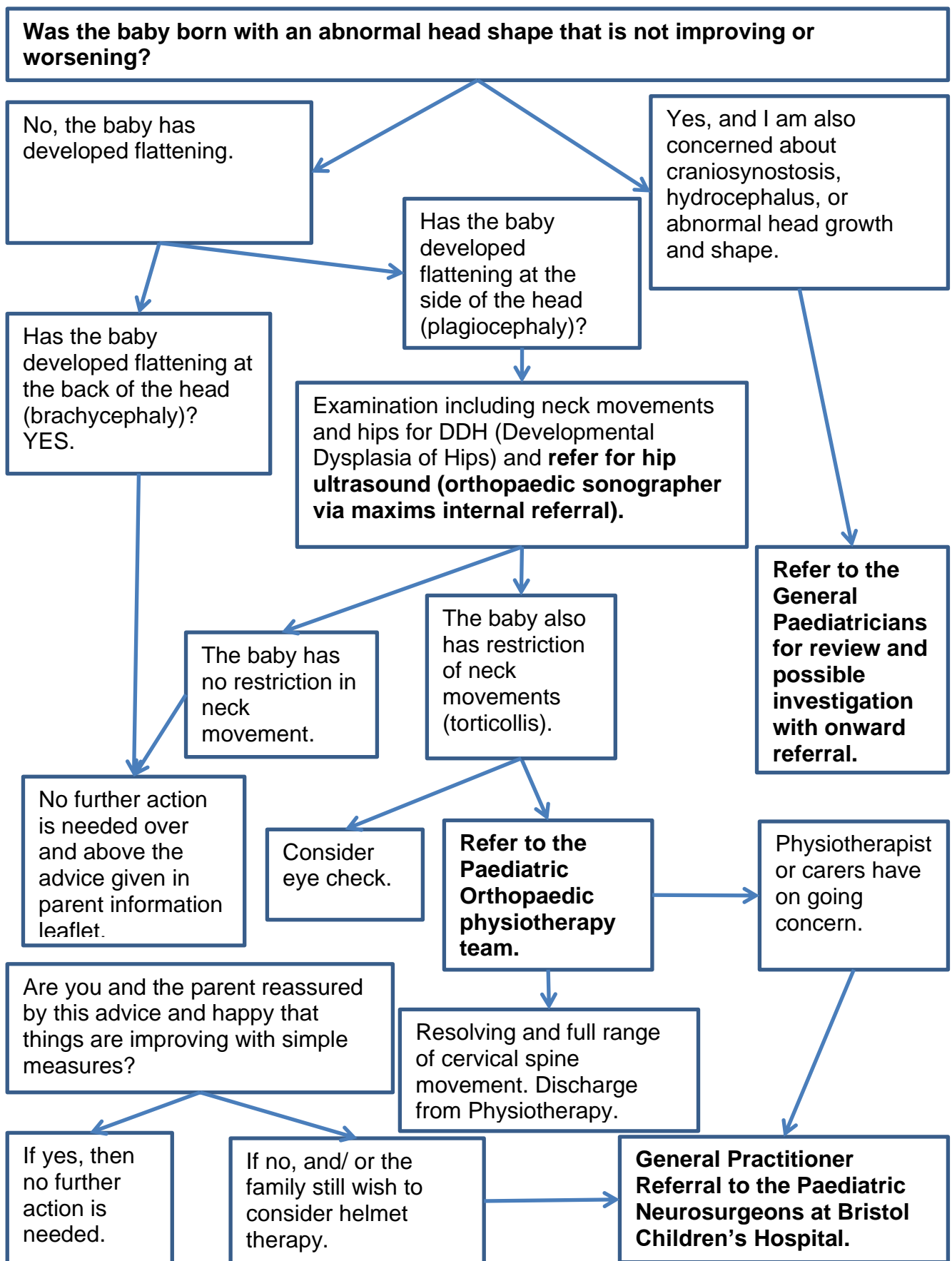
Royal Cornwall Hospitals
NHS Trust

Plagiocephaly and Brachycephaly Clinical Guideline

V4.0

April 2024

Summary- Referral Pathway for Abnormal Head Shape.



1. Aim/Purpose of this Guideline.

1.1. This guidance applies to health care professionals, children, and families.

1.2. This version supersedes any previous versions of this document.

Data Protection Act 2018 (UK General Data Protection Regulation – GDPR) Legislation.

The Trust has a duty under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 to ensure that there is a valid legal basis to process personal and sensitive data. The legal basis for processing must be identified and documented before the processing begins. In many cases we may need consent; this must be explicit, informed, and documented. We cannot rely on opt out, it must be opt in.

Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 is applicable to all staff; this includes those working as contractors and providers of services.

For more information about your obligations under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 please see the Information Use Framework Policy or contact the Information Governance Team.

Royal Cornwall Hospital Trust rch-tr.infogov@nhs.net

2. The Guidance.

2.1. Many babies develop a flattened head when they are a few months old, usually from sleeping on their back. It often corrects itself over time and is nothing to worry about.

It happens because a baby's skull is still soft enough to be molded and to change shape if there is constant pressure on one area of their head. The skull is made of plates of bone, which only start to strengthen and fuse together as the child grows older.

Flattening of the head is just a cosmetic problem. It does not cause any symptoms and doesn't affect the baby's brain, so their development is unaffected. It is very common with some reports estimating that nearly half of babies have the problem to some degree.

2.2. The following information explains:

- The difference between the two types of "flat head syndrome" in babies (plagiocephaly and brachycephaly).
- Why some babies are affected.
- What can be done to help correct it.
- The outlook for the child.

2.2.1. **Brachycephaly and plagiocephaly.**

There are two main ways that a baby's head can become flattened:

- The head can become flattened at one side, causing the head to look asymmetrical and distorted (for example, so that the ears are not aligned). This is known as plagiocephaly.
- The whole back of the head can become flattened, causing a widening of the head. This is known as brachycephaly. Sometimes, the front of the skull may bulge out in compensation.

2.2.2. **Why some babies are affected.**

The main cause of brachycephaly or plagiocephaly is usually the baby's sleeping position, although other factors play a part too. These are described below.

2.2.3. **Factors in the womb.**

Flattening of the skull can sometimes occur in the mother's womb. There may not be enough amniotic fluid inside the womb to cushion the baby (known as oligohydramnios). This means the baby's head can become temporarily deformed which can also happen as they travel down the birth canal. This also tends to happen more often in a multiple birth, for example when twins squash against each other in the womb.

2.2.4. **Giving birth prematurely.**

Premature babies are more likely to have a deformed skull because they are squeezed through the birth canal when their skulls have not fully developed (the skull becomes stronger in the last few weeks of pregnancy).

2.2.5. **Muscle problems.**

Sometimes, a baby will have tightened muscles in their neck, which prevents them from turning their head one way. This is called torticollis. This means they will always rest their head on the other side, causing this side to flatten. Physiotherapy can help correct this problem (see "what you can do" below).

2.2.6. **Sleeping position.**

Brachycephaly and plagiocephaly are commonly caused by the baby sleeping on their back every night. The back or one side of the baby's head (if their head naturally rolls to the side) is squashed against a firm mattress for a long time, which eventually forces the soft bone of the skull to flatten. Once flattened, the baby's head will automatically stay on or roll towards this side. It will become the preferred side for sleeping and for resting their head during the day. However, the solution is NOT to change the baby's sleeping position from lying on

their back at night. It is important for babies to sleep on their back as this reduces the risk of sudden infant death syndrome (SIDS/ cot death).

Instead, change the baby's position during the day to take some pressure off the flattened area (see "what you can do").

2.2.7. **Craniosynostosis.**

A flattened head may sometimes be caused by the bony plates of a baby's skull joining together abnormally early. This is known as craniosynostosis.

www.nhs.uk/conditions/craniosynostosis/Pages/Introduction.aspx

This can pull the baby's head out of shape and does need review by a medical professional to consider investigation and treatment.

2.2.8. **Clinical Assessment.**

Assessment of the baby should include examination of:

- Head position and normal passive neck movements- limitation suggests torticollis.
- Head shape and sutures (plagiocephaly and facial asymmetry are common)- refer to general paediatrician if concern about craniosynostosis, hydrocephalus, or abnormal head growth and shape.
- Eye movements- consider referral to ophthalmology if torticollis present.
- Back and spine, and movement of upper and lower limbs.
- Hips and referral for hip ultrasound via orthopaedic sonographer- developmental dysplasia of the hip (DDH) is a common association.

2.2.9. **What you can do.**

No treatment is necessary for mild cases of brachycephaly and plagiocephaly. The baby's skull should naturally correct itself over time if simple measures are taken to take pressure off the flattened part of their head and encourage them to try different positions.

You may find the following advice helpful:

- Give the baby time on their tummy during the day; the baby may be happier if a rolled-up towel is put under the shoulders and encourage them to try new positions during play time.
- Switch the baby between a sloping chair, a sling and a flat surface so there is not constant pressure on one part of their

head.

- Change the position of toys and mobiles in their cot to encourage them to turn their head to the non-flattened side.
- Refer to paediatric orthopaedic physiotherapy if the child seems to only be able to turn their head one way. Tight muscles in their neck may be preventing them from turning their head both ways.

It may take six to eight weeks of trying these measures before any improvement is noticed in the baby's head shape and the head shape can continue to improve up to 2 years of age.

2.2.10. **Helmet or skull band therapy.**

You may have heard about helmets or headbands, known as cranial orthoses, that aim to improve symmetry of a baby's skull. These custom-made devices are designed to be used in infants aged 6 to 12 months (the period of greatest skull growth), to apply pressure to "bulgy" parts of the skull and relieve pressure from other parts, enabling growth in the flatter areas of the skull. The device may also prevent the baby from lying on the flattened part of their head. However, their use is controversial. There is currently not enough evidence to say for sure whether a helmet or headband will make any additional improvement to the baby's head shape if the above measures are taken early on. NICE (The National Institute of Clinical Excellence) has made no recommendations as to use. Helmet therapy is available both on the NHS and privately (Costs are between £1,700-2,500). Consideration of helmet therapy by the NHS requires referral to the Paediatric Neurosurgeons in Bristol and referral does not guarantee this therapy.

Also consider that:

- The device usually needs to be worn for up to 23 hours a day, for 6-24 weeks.
- The baby will need to be reviewed regularly in Bristol to check the device is allowing and not restricting head growth, and for any necessary adjustments to be made.
- The baby may find the device uncomfortable, and there's a risk of it causing pressure sores on their head.

2.2.11. **Outlook.**

Mild flattening of the head usually corrects itself if you use simple measures to take pressure off the affected area of the skull. If there is restriction of neck movements then physiotherapy may be helpful. More severe cases of brachycephaly or plagiocephaly can still be improved over time, but some flattening usually remains. A helmet or headband may help correct the baby's skull shape, but this is not certain to work. You should weigh up the inconvenience and possible

discomfort to the child before trying this.

There is a helpful leaflet for parents from Great Ormond Street Hospital; plagiocephaly parent information leaflet, which can be found here:

<https://www.gosh.nhs.uk/conditions-and-treatments/conditions-we-treat-index-page-group/positional-plagiocephaly>.

3. Monitoring compliance and effectiveness

Information Category	Detail of process and methodology for monitoring compliance
Element to be monitored	Compliance with referral pathway.
Lead	Community paediatricians and general paediatricians. Audit lead.
Tool	Individual review of referrals using Excel to record findings.
Frequency	As required on individual basis.
Reporting arrangements	Child Health Audit and Guidelines meeting.
Acting on recommendations and Lead(s)	Required actions will be identified and completed in 3-6 months.
Change in practice and lessons to be shared	Required changes to practice will be identified and actioned within 3-6 months. A lead member of the team will be identified to take each change forward where appropriate. Lessons will be shared with all the relevant stakeholders.

4. Equality and Diversity

4.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the [Equality Diversity And Inclusion Policy](#) or the [Equality and Diversity website](#).

4.2. Equality Impact Assessment

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

Appendix 1. Governance Information

Information Category	Detailed Information
Document Title:	Plagiocephaly and Brachycephaly Clinical Guideline V4.0
This document replaces (exact title of previous version):	Plagiocephaly and Brachycephaly Clinical Guideline V3.0
Date Issued/Approved:	April 2024
Date Valid From:	April 2024
Date Valid To:	April 2027
Directorate / Department responsible (author/owner):	Dr. Rebecca Garland; Community Paediatric Consultant
Contact details:	01872 254516
Brief summary of contents:	Advice and guidance including referral pathway.
Suggested Keywords:	Plagiocephaly, brachycephaly, head shape, baby, children, paediatric.
Target Audience:	RCHT: Yes CFT: No CIOS ICB: No
Executive Director responsible for Policy:	Chief Medical Officer
Approval route for consultation and ratification:	Child Health Audit and Guidelines Group
Manager confirming approval processes:	Caroline Chappell
Name of Governance Lead confirming consultation and ratification:	Tamara Thirlby
Links to key external standards:	None required
Related Documents:	None required
Training Need Identified?	No
Publication Location (refer to Policy on Policies – Approvals)	Internet and Intranet

Information Category	Detailed Information
and Ratification):	
Document Library Folder/Sub Folder:	Clinical/ Paediatrics/ Neurology

Version Control Table

Date	Version Number	Summary of Changes	Changes Made by
July 2014	V1.0	Initial Issue.	Dr Jo Lewis. Community Paediatrician.
July 2017	V2.0	Review of content- no changes.	Dr Jo Lewis. Community Paediatrician.
November 2020	V3.0	Addition of recommendation for hip ultrasound. Neurosurgical team now based at Bristol Children's Hospital. Paragraph 2.2.8- information about clinical assessment added. Link to parental information leaflet updated.	Dr Rebecca Garland. Community Paediatric Registrar.
April 2024	V4.0	Full review, section 2.2.11 updated regarding accessing GOSH patient information leaflet. Updated to new Trust format.	Dr. Natasha Sauven; Community Paediatric Consultant.

All or part of this document can be released under the Freedom of Information Act 2000.

All Policies, Strategies and Operating Procedures, including Business Plans, are to be kept for the lifetime of the organisation plus 6 years.

This document is only valid on the day of printing.

Controlled Document.

This document has been created following the Royal Cornwall Hospitals NHS Trust [The Policy on Policies \(Development and Management of Knowledge Procedural and Web Documents Policy\)](#). It should not be altered in any way without the express permission of the author or their Line Manager.

Appendix 2. Initial Equality Impact Assessment

Section 1: Equality Impact Assessment (EIA) Form

The EIA process allows the Trust to identify where a policy or service may have a negative impact on an individual or particular group of people.

For guidance please refer to the Equality Impact Assessment Policy (available from the document library) or contact the Equality, Diversity, and Inclusion Team

rcht.inclusion@nhs.net

Information Category	Detailed Information
Name of the strategy / policy / proposal / service function to be assessed:	Plagiocephaly and Brachycephaly Clinical Guideline V4.0
Directorate and service area:	Child Health
Is this a new or existing Policy?	Existing
Name of individual completing EIA (Should be completed by an individual with a good understanding of the Service/Policy):	Child Health Audit and Guidelines Group
Contact details:	01872 253516

Information Category	Detailed Information
1. Policy Aim - Who is the Policy aimed at? (The Policy is the Strategy, Policy, Proposal or Service Change to be assessed)	Clear guidance and information including referral pathway.
2. Policy Objectives	Clear guidance and information including referral pathway.
3. Policy Intended Outcomes	Standardised referral pathways.
4. How will you measure each outcome?	See section 3.
5. Who is intended to benefit from the policy?	Children and families.

Information Category	Detailed Information
6a. Who did you consult with? (Please select Yes or No for each category)	<ul style="list-style-type: none"> • Workforce: Yes • Patients/ visitors: No • Local groups/ system partners: No • External organisations: No • Other: No
6b. Please list the individuals/groups who have been consulted about this policy.	Please record specific names of individuals/ groups: Child Health Audit and Guidelines Group.
6c. What was the outcome of the consultation?	Approved.
6d. Have you used any of the following to assist your assessment?	National or local statistics, audits, activity reports, process maps, complaints, staff, or patient surveys: No.

7. The Impact

Following consultation with key groups, has a negative impact been identified for any protected characteristic? Please note that a rationale is required for each one.

Where a negative impact is identified without rationale, the key groups will need to be consulted again.

Protected Characteristic	(Yes or No)	Rationale
Age	No	
Sex (male or female)	No	
Gender reassignment (Transgender, non-binary, gender fluid etc.)	No	
Race	No	Any information provided should be in an accessible format for the parent/ carer's needs- i.e., available in different languages if required/ access to an interpreter if required.

Protected Characteristic	(Yes or No)	Rationale
Disability (e.g. physical or cognitive impairment, mental health, long term conditions etc.)	No	Those parent/carers with any identified additional needs will be referred for additional support as appropriate- i.e., to the Liaison Team or for specialised equipment. Written information will be provided in a format to meet the family's needs e.g., easy read, audio etc.
Religion or belief	No	
Marriage and civil partnership	No	
Pregnancy and maternity	No	
Sexual orientation (e.g. gay, straight, bisexual, lesbian etc.)	No	

A robust rationale must be in place for all protected characteristics. If a negative impact has been identified, please complete section 2. If no negative impact has been identified and if this is not a major service change, you can end the assessment here.

I am confident that section 2 of this EIA does not need completing as there are no highlighted risks of negative impact occurring because of this policy.

Name of person confirming result of initial impact assessment: Child Health Audit and Guidelines Group.

If a negative impact has been identified above OR this is a major service change, you will need to complete section 2 of the EIA form available here:
[Section 2. Full Equality Analysis](#)