CLEFT LIP AND PALATE NEONATAL MANAGEMENT

1. **Aim/Purpose of this Guideline**
   1.1. This guideline applies to all staff managing the initial care of infants born with cleft lip and/or palate. It includes notification details, initial management of feeding and details of key contacts.

2. **The Guidance**
   2.1. Many babies will have antenatal detection of a cleft lip and/or palate or be noted at or soon after birth. The South West Cleft Team is managed in Bristol. The manager is Mr Richard Willerton. Parents of babies with antenatally noted defects will often have met the Bristol team and have prior information regarding management and feeding plans.

2.2 **Management at birth**

Any baby born with a cleft lip or palate should be notified to the Bristol Team via the South West Cleft Team, located at the Bristol Dental Hospital, **ON THE DAY DEFECT NOTED** (24 hour, service) Tel: (01173) 421177

Mr Wenger, RCH Orthodontist should also be informed via his secretary as soon as the defect is noted. He will normally visit the infant on the Postnatal Ward/NNU to assess the baby, discuss the likely management with parents, and fit a feeding plate if appropriate. Tel: **01872 253988/ 3980**

Cleft notifications – the questions you will be asked:

1. Hospital and Ward, Telephone number
2. Baby’s name, gender and date of birth
3. Home address and telephone number
4. Mother’s name
5. GP details
6. Provisional diagnosis (Note: the Cleft Surgeon makes the definitive diagnosis)
7. Is the baby feeding and how?
8. When is the baby likely to go home?
9. Name of person notifying and contact number

2.2. **Management of Feeding**
Feeding Procedure

Initially all oral feeds will need close supervision

2.3 *Insertion of a Nasopharyngeal airway

A nasopharyngeal airway (Endotracheal tube) can be inserted for supportive airway management if the cleft is causing the tongue to obstruct the airway and causing difficulties with maintenance of adequate oxygenation. It aims to bypass the upper airway obstruction at the level of the nose, nasopharynx or base of the tongue.

Sizing of the airway

Measure from the tip of the baby’s nose, to the tragus of the ear. The approximate Endotracheal (ET) tube width can be estimated by matching the diameter to the baby’s nostril size. The tube size should not cause blanching of the nostril on insertion but needs to be wide enough to be effective.

Have an additional ET tube of 0.5mm narrower than planned ET tube size available
To prepare the Endotracheal (ET) Tube:

- Do not shorten the ET tube
- Cut the straight (non beveled) end of the ET tube into 3 equal strips down to the desired insertion length at nostril
- The right nostril is preferred due to the natural curve of the ET tube and the flange bevel will open into the pharynx

[A standard ET tube via the left nostril will cause the bevel to sit against the pharyngeal wall and is likely to occlude]

To insert the NPA:
Ensure oxygen and suction available – suction tube half diameter of ET tube ie. size 3.0mm ETT = size 6Fg suction catheter

- Put a water based lubricant, such as Aqualube to coat the outer, distal half of the tube to facilitate insertion
- Lift the head to place nostrils to a ‘sniffing’ position
- Gently insert the tube via the right nares, aiming parallel to the nasal floor rather than upwards
- Do not force the insertion to avoid trauma, summon senior help if any difficulty
- Place hydrocolloid dressings onto both cheeks and bridge of nose
- Place the ‘split’ sides over the dressings and apply zinc oxide tape to secure the tube firmly
- Observe for patency and flow of exhalation

Subsequent care:
Observe for immediate signs of respiratory improvement, difficulty with secretions or (rarely) bleeding
Observe for signs of any blanching to the nostrils
Have suction available at all times plus spare NPA and size smaller

- Milk coming up the airway before, during or after feeds can occur if the NPA is too long. A small amount of regurgitation may initially be expected due to close proximity of the epiglottis
- A lateral X-Ray of the neck can verify tip position or use direct laryngoscope vision

2.4 Breast feeding:
Cleft lip – breast feeding possible, need to form a seal. Use more breast/thumb to mould into gap, upright position can help.

Cleft Palate- If cleft is small, breast feeding is possible. Upright position with manual compression of breast, ensure an adequate seal and baby swallowing.

Larger cleft – reduces suction ability so assisted feeding with soft bottle needed  

Cleft Lip and Palate – Generally a wide cleft, baby unable to seal and create suction pressure, tongue movement often good, provide assisted feeding with soft bottle.

Assisted/bottle feeding:
- Use MAM Soft bottle, MAM orthodontic teat (Mr Wenger will provide in working hours or contact NNU)
- Gently squeeze the soft bottle whilst baby sucking. Squeezing too fast risks nasal regurgitation and distress, too slow risks excessive non-nutritive sucking and excess air intake
- Aim to complete feed in 30-40 minutes with minimal air intake Any change in feeding skills or breathing pattern STOP and reassess for possible NG Tube feeding and encourage non-nutritive sucking. Liaise with Mr Wenger/feeding support nurse

Mr Wenger review before discharge where possible. Discuss baby with CLAP feeding advisor nurse on Bristol number. Weigh every 4 days. Discharge with target volume feeding plan as below

Calculate feed volume for 60ml/kg/day in 3 hourly volumes day 0
- 90 ml/kg/day Day 1
- 120 ml/kg/day Day 2
- 150 ml/kg/day Day 3 in 3-4 hourly volumes as tolerated

Weigh every 4-5 days via midwife/HV in first 3 weeks
Re-evaluate with CLAP team if poor weight gain

2.5 Other Useful contacts:
South West Cleft Team – Contact List – Truro

Royal Cornwall Hospital, Truro 01872 250000

Nick Wenger  Nick.wenger@rcht.cornwall.nhs.uk
Ms Alison Taylor Speech & Language Therapist. 01872 354311 Alison.taylor@ciospct.cornwall.nhs.uk
Dr Lynn Oliver Clinical Psychologist. 01872 354353. lynn.olver@cpt.cornwall.nhs.uk
David Whinney Consultant ENT Surgeon. 01872 253988 david.whinney@rcht.cornwall.nhs.uk

South West Cleft Team – Contact List – Bristol

Bristol Dental Hospital: 0117 970 1212

Mrs Liz Albery Clinical Director /Lead Speech & Language Therapist 0117 34221166 liz.albery@uhbristol.nhs.uk
Mr Nigel Mercer Consultant Cleft Surgeon (Primary Surgery) 0117 3421176 nigel.mercer@.uhbristol.nhs.uk
Mr Alistaire Cobb Consultant Cleft Surgeon (Primary Surgery) 0117 3421180 tom.cobb@uh.bristol.nhs.uk
Mr Peter Revington Consultant Cleft Surgeon (Secondary Surgery) 0117 340 3997 peter.revington@nbt.nhs.uk
Mr Scott Deacon Lead Consultant Orthodontist 0117 3421173 scott.deacon@uhbristol.nhs.uk
Cathy Marsh Lead Specialist Cleft Nurse 0117 3421169 cathy.marsh@uhbristol.nhs.uk
Mrs Anne Roberts Principal Speech & Language Therapist 0117 3421167 anne.roberts@uhbristol.nhs.uk
Tina Owen Outreach Specialist/Counsellor 0117 3421164 tina.owen@uhbristol.nhs.uk
Dr Alison Hooper Associate Specialist, Paediatric Audiology 0117 342 8350 alison.hooper@uhbristol.nhs.uk
Mr Richard Willerton Cleft Network Manager 0117 3421157 richard.willerton@uhbristol.nhs.uk
3. Monitoring compliance and effectiveness

<table>
<thead>
<tr>
<th>Element to be monitored</th>
<th>Key changes in practice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lead</strong></td>
<td>Dr Paul Munyard. Consultant Paediatrician and Neonatologist</td>
</tr>
<tr>
<td><strong>Tool</strong></td>
<td>Audit. To be included in the Neonatal clinical Audit Programme. Findings reported to the Directorate Audit meeting / Governance meeting.</td>
</tr>
<tr>
<td><strong>Frequency</strong></td>
<td>As dictated by audit findings</td>
</tr>
<tr>
<td><strong>Reporting arrangements</strong></td>
<td>Child Health Directorate Audit and Clinical Guidelines meetings.</td>
</tr>
<tr>
<td><strong>Acting on recommendations and Lead(s)</strong></td>
<td>Dr Paul Munyard. Consultant Paediatrician and Neonatologist Dr Andrew Collinson. Consultant Paediatrician and Neonatologist</td>
</tr>
<tr>
<td><strong>Change in practice and lessons to be shared</strong></td>
<td>Required changes to practice will be identified and actioned within 3 months of audit. 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.</td>
</tr>
</tbody>
</table>

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 & Human Rights 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

<table>
<thead>
<tr>
<th>Document Title</th>
<th>Management of Cleft Lip and Palate – Neonatal Clinical Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Date Issued/Approved:</strong></td>
<td>November 2014</td>
</tr>
<tr>
<td><strong>Date Valid From:</strong></td>
<td>November 2014</td>
</tr>
<tr>
<td><strong>Date Valid To:</strong></td>
<td>November 2017</td>
</tr>
<tr>
<td><strong>Directorate / Department responsible (author/owner):</strong></td>
<td>Judith Clegg. Advanced Neonatal Nurse Practitioner.</td>
</tr>
<tr>
<td></td>
<td>Paul Munyard Consultant Paediatrician and Neonatologist.</td>
</tr>
<tr>
<td></td>
<td>Neonatal. Child Health</td>
</tr>
<tr>
<td><strong>Contact details:</strong></td>
<td>01872 252667</td>
</tr>
<tr>
<td><strong>Brief summary of contents</strong></td>
<td>This guideline is designed to provide guidance on the management of an infant diagnosed with a cleft lip and / or palate</td>
</tr>
<tr>
<td><strong>Suggested Keywords:</strong></td>
<td>Neonatal. Cleft lip. Cleft palate.</td>
</tr>
<tr>
<td><strong>Target Audience</strong></td>
<td>RCHT</td>
</tr>
<tr>
<td><strong>Executive Director responsible for Policy:</strong></td>
<td>Executive Director</td>
</tr>
<tr>
<td><strong>Date revised:</strong></td>
<td>November 2014</td>
</tr>
<tr>
<td><strong>This document replaces (exact title of previous version):</strong></td>
<td>Assessment and management of cleft lip and palate</td>
</tr>
<tr>
<td><strong>Approval route (names of committees)/consultation:</strong></td>
<td>Neonatal consultants. Child Health Audit and guidelines meetings</td>
</tr>
<tr>
<td><strong>Divisional Manager confirming approval processes:</strong></td>
<td>Sheena Wallace</td>
</tr>
<tr>
<td><strong>Name and Post Title of additional signatories:</strong></td>
<td>‘Not Required’</td>
</tr>
<tr>
<td><strong>Signature of Executive Director giving approval:</strong></td>
<td>{Original Copy Signed}</td>
</tr>
<tr>
<td><strong>Publication Location (refer to Policy on Policies – Approvals and Ratification):</strong></td>
<td>Internet &amp; Intranet</td>
</tr>
</tbody>
</table>
Links to key external standards
South West Cleft Team Standards – Bristol Children’s Hospital

Related Documents:
- South West Cleft Team Standards – Bristol Children’s Hospital.

Training Need Identified? No

Version Control Table

<table>
<thead>
<tr>
<th>Date</th>
<th>Version No</th>
<th>Summary of Changes</th>
<th>Changes Made by (Name and Job Title)</th>
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<tr>
<td>June 2011</td>
<td>1.0</td>
<td>Initial issue</td>
<td>Dr Paul Munyard. Consultant Neonatologist and paediatrician.</td>
</tr>
<tr>
<td>12 Nov 2014</td>
<td>2.0</td>
<td>Reviewed and formatted</td>
<td>Reviewed by: Dr Paul Munyard. Consultant Neonatologist and paediatrician. Formatted by Kim Smith. Staff nurse</td>
</tr>
</tbody>
</table>

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

This document is to be retained for 10 years from the date of expiry.

This document is only valid on the day of printing

Controlled Document
This document has been created following the Royal Cornwall Hospitals NHS Trust Policy on Document Production. 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 Form

<table>
<thead>
<tr>
<th>Name of the strategy / policy / proposal / service function to be assessed (hereafter referred to as policy)</th>
<th>Management of Cleft Lip and Palate – Neonatal Clinical Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directorate and service area: Child Health. Neonatal</td>
<td>Is this a new or existing Policy? Existing</td>
</tr>
<tr>
<td>Name of individual completing assessment: Paul Munyard and Judith Clegg</td>
<td>Telephone: 01872 251667</td>
</tr>
</tbody>
</table>

1. Policy Aim*
   Who is the strategy / policy / proposal / service function aimed at?
   To provide guidance on the management of an infant born with a cleft lip and palate.

2. Policy Objectives*

3. Policy – intended Outcomes*
   Evidence based practice

4. *How will you measure the outcome?
   Audit

5. Who is intended to benefit from the policy?
   Neonatal / Midwifery medical and nursing staff
   Infants and their carers

6a) Is consultation required with the workforce, equality groups, local interest groups etc. around this policy?

   b) If yes, have these *groups been consulted?

   C). Please list any groups who have been consulted about this procedure.

7. The Impact

Please complete the following table.

<table>
<thead>
<tr>
<th>Equality Strands:</th>
<th>Yes</th>
<th>No</th>
<th>Rationale for Assessment / Existing Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Sex (male, female, transgender / gender reassignment)</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race / Ethnic communities /groups</td>
<td>x</td>
<td></td>
<td></td>
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<tr>
<td>Disability - learning disability, physical disability, sensory impairment and mental health problems</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religion / other beliefs</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marriage and civil partnership</td>
<td>x</td>
<td></td>
<td></td>
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<tr>
<td>Pregnancy and maternity</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual Orientation, Bisexual, Gay, heterosexual, Lesbian</td>
<td>x</td>
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<td></td>
</tr>
</tbody>
</table>

You will need to continue to a full Equality Impact Assessment if the following have been highlighted:
- You have ticked “Yes” in any column above and
- No consultation or evidence of there being consultation - this excludes any policies which have been identified as not requiring consultation. or
- Major service redesign or development

8. Please indicate if a full equality analysis is recommended. No

9. If you are not recommending a Full Impact assessment please explain why.

No area indicated

Signature of policy developer / lead manager / director
Paul Munyard 12 November 2014

Names and signatures of members carrying out the Screening Assessment

Keep one copy and send a copy to the Human Rights, Equality and Inclusion Lead, c/o Royal Cornwall Hospitals NHS Trust, Human Resources Department, Knowledge Spa, Truro, Cornwall, TR1 3HD

A summary of the results will be published on the Trust’s web site.

Signed _____Kim Smith__________

Date ________12 November 2014________