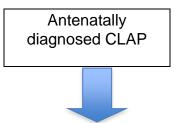


# Cleft Lip and Palate – (CLAP) Management Neonatal Clinical Guideline

**V4.0** 

**April 2019** 

### **Summary**



Inform neonatal team pre delivery, check soft bottle available if presumed large cleft palate/migrognathia.

Have NPA and Special Airway Box available at delivery. Found in bottom drawer neonatal resuscitation trolley



For diagnosed and undiagnosed CLAP 
Manage airway at delivery using NPA if necessary (see section 2)

Use pulse oximetry to guide oxygen use

Prone position if micrognathia/tongue causing obstruction risk

Urgent review ENT/anaesthetic team

Oncall Paediatric Respiratory Team advice BRCH 0117 9230000



When airway stable and no immediate respiratory concern check gag reflex before offering oral feed as detailed in **Section 2 Liaise with Cleft CNS for feeding advice.**If other co-morbidities consider Karyotyping and CGH array



Contact South West Cleft service Team 0117 3421177 plus Cornwall Cleft Nurse Specialist (CNS) also Mr Wenger, RCH orthodontist on day of birth

Ensure feed support and volume of feeds adequate before discharge with clear plan for follow up and monitoring progress in place

Refer for enhanced hearing assessment if cleft palate present

### 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 airway support and details of key contacts
- 1.2. This version supersedes any previous versions of this document.

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

The Trust has a duty under the DPA18 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 can't rely on Opt out, it must be Opt in.

DPA18 is applicable to all staff; this includes those working as contractors and providers of services.

For more information about your obligations under the DPA18 please see the 'information use framework policy', or contact the Information Governance Team rch-tr.infogov@nhs.net

#### 2. The Guidance

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 Service Team is managed in Bristol.

Parents of babies with antenatally noted defects will often have met the Bristol team and have prior information regarding management and feeding plans.

#### 2.1. Management at birth

2.1.1. 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: (0117) 3421177 plus CNS. 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

#### 2.1.2. Cleft notifications – the questions you will be asked:

- **1.** Hospital and Ward, Telephone number
- 2. Baby's name, gender, birth weight, gestation and date of birth
- 3. Baby's NHS Number
- 4. Home address and telephone number
- 5. Parent's names

- 6. GP details
- 7. Provisional diagnosis
- **8.** Was there an antenatal diagnosis?
- 9. Is the baby feeding and how?
- **10.**When is the baby expected to go home?
- 11. Name and designation of the person notifying and contact number

Within the next 24 hours the aim is that the family will be visited in Hospital by a Cleft CNS to confirm diagnosis, assess feeding and provide appropriate equipment as necessary

#### 2.2. Management of Feeding.

For feeding advice contact: Lead Nurse/CNS Cornwall via the South West Cleft Team, Bristol - 01173 421177

#### **Feeding Procedure**

Observe for any
airway problems (eg. raised
respiratory rate, stridor,
recession), and check
saturations

Check gag reflex **Do not** offer oral feed if
no or poor gag reflex

refer for Paediatric review

Gag reflex present = safe to offer oral feeds as below

Nurse prone until paediatric review

YES

If baby needs insertion of
Nasopharyngeal tube\* for airway
management
Nil orally until assessed by
ENT/Orthodontist team
Give NG Tube feed if respiratory
status stable

Initially all oral feeds will need close supervision

NO

#### 2.3. \*Insertion of a Nasopharyngeal airway (NPA)

A nasopharyngeal airway (or 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.

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#### 2.3.1. Sizing of the airway

Measure from the tip of the baby's nose, to the tragus of the ear.

#### 2.3.1.1. Using a commercially made NPA:

Use a Size 3.0 NPA adjusting the nasal flange to adjust the final length before fixing. Do not cut the insertion/tip end.

2.3.1.2. If using an Endotracheal (ET) tube the 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. The ETT size is usually a size down from the intubation size for the baby

#### 2.3.2. To prepare the Endotracheal (ET) Tube:

- 2.3.2.1. Do not shorten the ET tube
- 2.3.2.2. Cut the straight (non beveled) end of the ET tube into 3 equal strips down to the desired insertion length at nostril
- 2.3.2.3. 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]

#### 2.3.3. To insert the NPA:

Ensure oxygen and suction available – suction tube half diameter of NPA or ET tube ie. size 3.0mm NPA/ETT = size 6Fg suction catheter

- 2.3.1.1. Put a water based lubricant, such as Aqualube to coat the outer, distal half of the tube to facilitate insertion
- 2.3.1.2. Lift the head to place nostrils to a 'sniffing' position
- 2.3.1.3. Gently insert the tube via the right nares, aiming parallel to the nasal floor rather than upwards
- 2.3.1.4. Do not force the insertion to avoid trauma, summon senior help if any difficulty
- 2.3.1.5. Place hydrocolloid dressings onto both cheeks (and bridge of nose for ETT use)
- 2.3.1.6. The NPA can be secured using 2 lengths of plain 3/0 Mersilk suture, wrapped around the base of the flange and secured on each cheek under zinc oxide tape

- 2.3.1.7. If using an ETT as an NPA place the 'split' sides over the dressings and apply zinc oxide tape to secure the tube firmly
- 2.3.1.8. Observe for patency and flow of exhalation
- 2.3.1.9. Check initial placement length using direct laryngoscope vision and record agreed length in baby's notes

#### 2.3.4. Subsequent care:

- 2.3.4.1. Observe for immediate signs of respiratory improvement, difficulty with secretions or (rarely) bleeding
- 2.3.4.2. Observe for signs of any blanching to the nostrils
- 2.3.4.3. 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

#### 2.4. **FEEDING**

- 2.4.1. If any signs of increased respiratory effort DO NOT commence oral feeding, refer for paediatric airway assessment
- 2.4.2. Regular skin to skin contact and putting to the breast if wished and clinically appropriate should be encouraged

#### 2.4.3. **Breast feeding:**

- 2.4.3.1. **Cleft lip** breast feeding possible, need to form a seal. Use more breast/thumb to mould into gap, upright position can help.
- 2.4.3.2. Cleft Palate- If cleft is small, breast feeding is possible but will need topping up and careful monitoring of weight gain 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.

  Any change in feeding skills or breathing patterns STOP,
  - reassess, may need NG feeds and non-nutritive sucking
- 2.4.3.3. **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.

#### 2.4.4. Assisted/bottle feeding:

- 2.4.4.1. Use MAM Soft bottle, MAM orthodontic teat (Mr Wenger will provide in working hours or contact NNU)
- 2.4.4.2. Gently apply pulsing pressure to squeeze the soft bottle whilst baby actively sucking. Squeezing too fast risks nasal regurgitation and distress, too slow risks excessive non-nutritive sucking and excess air intake
- 2.4.4.3. 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
- 2.5. Mr Wenger to 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
- 2.6. 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

- 2.7. Weigh every 4-5 days via midwife/HV in first 3 weeks
- 2.8. Re-evaluate with CLAP team if poor weight gain
- 2.9. Other Useful contacts:

#### **South West Cleft Service – Contact List – Truro**

Royal Cornwall Hospital, Truro 01872 250000

Mr Nick Wenger Consultant Orthodontist 01872 253988.

Mr David Whinney Consultant ENT Surgeon. 01872 253407

#### South West Cleft Team - Contact List - Bristol

**Bristol Dental Hospital**: 0117 970 1212

Cleft Lip and Palate team: 0117 342 1177 or email ubh-tr.swcleftservice@nhs.net

# 3. Monitoring compliance and effectiveness

Element to be monitored	All babies referred day 1 to Bristol team and follow up arranged
Lead	Neonatal Lead Consultant
Tool	Badger discharge summary and baby's notes
Frequency	As dictated by audit findings
Reporting arrangements	Child Health Directorate audit and clinical guidelines meetings
Acting on recommendations and Lead(s)	Lead Consultant for NNU
Change in practice and lessons to be	Required changes to practice will be identified and actioned within 3 months of audit.
shared	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 <u>'Equality, Inclusion & Human Rights Policy'</u> or the <u>Equality and Diversity website</u>.

# 4.2. Equality Impact Assessment

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

# **Appendix 1. Governance Information**

Document Title		Palate – (CLAP) cal Guideline V		
Date Issued/Approved:	29 Nov 2018			
Date Valid From:	24 April 2019			
Date Valid To:	24 April 2022			
Directorate / Department responsible (author/owner):	Practitioner.	Advanced Ned d Consultant Pa		
Contact details:	01872 25266	7		
Brief summary of contents	Management of known and undiagnosed cleft lip and/or palate at birth. Airway support management. Feeding support management. Referral pathways			
Suggested Keywords:	Neonatal, Cleft Lip, Cleft Palate			
Target Audience	RCHT ✓	CFT	KCCG	
Executive Director responsible for Policy:	Medical Director			
Date revised:	29 Nov 2018			
This document replaces (exact title of previous version):	Management of Cleft Lip and Palate – (CLAP) Neonatal Clinical Guideline V3.0			
Approval route (names of committees)/consultation:	Neonatal con Neonatal Gui	sultants. delines meetin	g	
Care Group General Manager confirming approval processes	Debra Shield	S		
Name and Post Title of additional signatories	Not required			
Name and Signature of Care Group/Directorate Governance Lead	{Original Copy Signed}			
confirming approval by specialty and care group management meetings	Name: Caroline Amukusana			
Signature of Executive Director giving approval	(Original Copy			

Publication Location (refer to Policy on Policies – Approvals and Ratification):	Internet & Intranet	✓ Intranet Only		
Document Library Folder/Sub Folder	Clinical guideline, Child Health, Neonatal			
Links to key external standards	South West Cleft ServiceTeam Standards  – Bristol Dental Hospital			
Related Documents:	References GOSH (2014) NPA use Clinical Guideline Roberts,K.,Whalley,H.,Bleetman,A.(2005) The nasopharyngeal airway;Dispelling the myths and establishing the facts. Emergency Medical Journal 22,394-396 South West Cleft Team Standards – Bristol Children's Hospital.			
Training Need Identified?	no			

#### **Version Control Table**

Date	Version No	Summary of Changes	Changes Made by (Name and Job Title)
June 2011	1.0	Initial issue	Judith Clegg, ANNP Neonatal Unit
12 Nov 2014	2.0		Author Judith Clegg ANNP. Reviewed by: Dr Paul Munyard. Consultant Neonatologist and paediatrician. Formatted by Kim Smith. Staff nurse
6 Dec 2017	3.0	Reviewed, flowchart added, new bespoke NPA guidance added	Judith Clegg, ANNP Neonatal Unit
29 Nov 2018	4.0	Reformatted. Contacts updated. Amended guidance from Bristol Team added to flowchart and section 2. Minor formatting amendments.	Judith Clegg, ANNP Neonatal Unit

# All or part of this document can be released under the Freedom of Information <u>Act 2000</u>

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 for the Development and Management of Knowledge, Procedural and Web Documents (The Policy on Policies). 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**

Name of the strategy / policy /proposal / service function to be assessed Cleft Lip and Palate – (CLAP) Management Neonatal Clinical Guideline V4.0 Directorate and service area: Is this a new or existing Policy: Child Health, Neonatal Unit existing Name of individual completing assessment: Telephone: Judith Clegg 01872 252667 1. Policy Aim\* To provide guidance on the management of an infant born with a cleft Who is the strategy / policy / proposal / lip and palate. service function aimed at? 2. Policy Objectives\* As above 3. Policy – intended Outcomes\* Evidence based practice 4. \*How will you measure the Audit outcome? 5. Who is intended to Neonatal / Midwifery medical and nursing staff benefit from the Infants and their carers policy? External Local 6a Who did you Workforce **Patients** Other organisations groups consult with Χ b). Please identify the Please record specific names of groups groups who have Neonatal Guidelines Group been consulted about South West Cleft Service Team this procedure. What was the outcome of the Guideline approved consultation?

### 7. The Impact

No areas indicated

Please complete the following table. If you are unsure/don't know if there is a negative impact you need to repeat the consultation step.

Are there concerns t	that the	e polic	y <b>could</b> h	nave differential impa	ct on:			
Equality Strands:	Yes	No	Unsure	Rationale for A Evidence	ssessm	ent / Exi	isting	
Age		X						
Sex (male, female, trans-gender / gender reassignment)		X						
Race / Ethnic communities /groups		X		Any information provaccessible format for i.e. available in differ required/access to a	r the pa rent lan	arent/ca guages	rer's ne if	
Disability - Learning disability, physical impairment, sensory impairment, mental health conditions and some long term health conditions.		Х		Those parent/carer's additional needs will support as appropria or for specialised ed Written information to meet the family's audio etc	s with a I be refe ate - i.e Juipmer will be p	ny iden erred fo e to the nt. orovided	tified r additi Liaison d in a fo	onal team ormat
Religion / other beliefs		Х						
Marriage and Civil partnership		X						
Pregnancy and maternity		Х						
Sexual Orientation, Bisexual, Gay, heterosexual, Lesbian		Х						
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								
				eing consultation- this econsultation. <b>or</b>	excludes	any <i>po</i>	licies wl	nich
Major this relation	tes to s	ervice	redesign o	or development				
8. Please indicate if a	full equ	ıality ar	nalysis is i	recommended.	Yes		No	x
9. If you are <b>not</b> recommending a Full Impact assessment please explain why.								

Signature of policy developer / lead manager / director Judith Clegg, ANNP Neonatal Unit			ompletion and submission 19
Names and signatures of members carrying out the Screening Assessment	Judith Clegg     Policy Review Group (PRC)	<del>3</del> )	PRG approved

# This EIA will not be uploaded to the Trust website without the approval of the Policy Review Group.

Trovion Group:
A summary of the results will be published on the Trust's web site.
Signed Judith Clegg
Date10/04/2019