Appendix 6

Baby Label or
Name …….
Hospital number……

North West London Perinatal Network

Checklist for managing a baby referred for Cooling

Use in conjunction with

"Cooling guidance for babies presenting with moderate to severe hypoxic ischaemic encephalopathy within the NWLPN"

Referring Hospital: …….. **Consultant Obstetrician:** …… **Consultant Paediatrician:** …… **Junior Doctor:** …… **Nurse:** ……	Please tick in the appropriate column	
	Yes	**No**
Does the baby meet criteria A? *(see over page)*		
Does the baby meet criteria B? *(see over page)*		
Record your findings in baby's medical records		
If yes to A and B continue passive cooling		
• Site rectal temperature probe in available		
• Record rectal / axillary temperature every 15 minutes		
Assess and record the severity of encephalopathy using the score chart C *(see over page)*		
Attending / on call consultant in local hospital informed		
Speak to Parents		
• Explain clinical condition and need for cooling and referral		
• Obtain verbal consent to continue passive cooling and referral		
Commence CFM if available		
Telephone QCCH *(see Appendix 3 "Referral of a Baby for Cooling Treatment Actions for Referring Hospitals")*		
Is the baby judged eligible for active cooling by QCCH team?		
Continue to follow Appendix 3 and 4		
Maintain passive cooling prior and during transfer (Appendix 4 – *"Passive Cooling – How to do it")*		
Monitor and record vital signs, rectal/axillary temperature every 15 minutes and manage baby's clinical condition as detailed in the guideline.		
Inform the parents of transfer, give them them a copy of the "*UK TOBY Cooling Register Parent Information Leaflet"* (Appendix 5) and a photo of their baby.		
Complete first page of "*UK TOBY Cooling Register form"* (Appendix 2)		
GET the placenta sent for histology and ask for full description of events leading to birth of baby to be written on the request form		
Prepare all documentation to accompany baby on transfer. Provide detailed notes on pregnancy, labour, delivery, resuscitation, placenta and maternal condition after birth as well maternal and family history (see Appendix 1 -*"Guideline for the management and investigation of neonatal encephalopathy*")		
If available, obtain a copy of the CFM to accompany the baby		
SEND this check list with the baby		
SEND "*UK TOBY Cooling Register form"* (Appendix 2) with the baby		

Baby Label or
Name ……
Hospital number……

Treatment Criteria

(see Cooling guidance for babies presenting with moderate to severe hypoxic ischaemic encephalopathy within the NWLPN)

A **Infants ≥36 completed weeks gestation** admitted to the Neonatal Unit with at least **one** of the following:

- Apgar score ≤5 at 10 minutes after birth
- Continued need for resuscitation, including endotracheal or mask ventilation, at 10 minutes after birth
- Acidosis within 60 minutes of birth (defined as any occurrence of umbilical cord, arterial or capillary pH <7.00).
- Base Deficit ≥16 mmol/L in umbilical cord or any blood sample (arterial, venous or capillary) within 60 minutes of birth.

Infants that meet criteria A should be assessed for whether they meet the neurological abnormality entry criteria (B).

B **Seizures or moderate to severe encephalopathy**, consisting of:

- Altered state of consciousness (reduced response to stimulation or absent response to stimulation) and
- Abnormal tone (focal or general hypotonia, or flaccid) and
- Abnormal primitives reflexes (weak or absent suck or Moro response).

The criteria for defining moderate and severe encephalopathy are listed in this table:

Parameter	Moderate Encephalopathy	Severe Encephalopathy
Level of consciousness	Lethargic	Stupor or coma
Spontaneous Activity	Decreased Activity	No activity
Posture	Distal flexion, complete extension	Decerebrate
Tone	Hypotonia (focal or general)	Flaccid
Suck	Weak	Absent
Moro	Incomplete	Absent
Pupils	Constricted	Deviated, dilated or non-reactive
Heart rate	Bradycardia	Variable
Respiration	Periodic breathing	Apnoea

C **Encephalopathy score**

Sign	0	1	2	3
Alertness	Alert	Irritable	Poorly responsive	Comatose
Tone	Normal	Hypertonia	Hypotonia	
Respiratory Status	Normal	Respiratory distress* (Apnoea/ needing oxygen)	CPAP or mechanical ventilation	
Reflexes	Normal	Hyperreflexia	Hyporeflexia	Absent reflexes
Seizure	None	Suspected**	Confirmed clinical seizure***	
Feeding	Normal (Breast/bottle)	Tube/ Nil by mouth		

Please score EVERY sign (allocate highest score unless lower score can be elicited on examination

***What is respiratory distress?**
Examples include:
Tachypnoea, recession, irregular or periodic breathing, oxygen requirement.

****What is a suspected seizure?**
Examples include:
Posturing, lip smacking, head turning, eye turning.

*****What is a clinical seizure?**
Examples include:
Generalised tonic clonic movements which do not stop when the limbs are held.
Posturing associated with apnoea > 20 seconds or signficant bradycardias.
Episodes of posturing, lip smacking, head turning, eye turning lasting more than 2 minutes on more than 2 occasions.