APNOEA AND BRADYCARDIA OF PREMATURITY

What is apnoea?

This is where breathing stops, with one or more characteristics.
- Lasting more than 20 seconds.
- The baby’s colour may change to pale, purplish or blue.
- Slowing of the heart rate, known as a bradycardia.

What is a bradycardia?

Bradycardia is a slowing of the heart rate to less than 100 beats per minute (in a premature baby) Bradycardia is often followed by a period of apnoea. Term babies may have a normal heart rate of less than 100 at rest.

Is apnoea just due to prematurity?

No not always. Apnoea and bradycardia can be caused by (or increased in frequency) by infection, low blood sugar, temperature instability, hypoxia (insufficient oxygen) seizure, or mechanical problems with breathing i.e. secretions blocking the airway.

Why do preterm babies have apnoea?

Premature babies have an immature respiratory centre in their brain, so have periods of shallow breathing or pauses in breathing. Apnoeas are more common when babies are sleeping. As a baby gets older, his/her breathing will become more regular. Usually, apnoea of prematurity markedly improves or goes away by the time the baby reaches 34/35 weeks gestation. This time course is variable.

How are apnoeas and bradycardias treated?

Your baby may need one or more of these.
- Medication that stimulates breathing known as caffeine.
- Stimulation. Gentle stroking or tickling of the feet.
- CPAP (continuous positive airways pressure). Air and oxygen are delivered under pressure via small tubes in the baby’s nose.
- Mechanical ventilation (breathing machine). If the baby’s apnoeas are severe, the baby may need help with breathing.

How do I know if my baby is having an apnoea and bradycardia?

Your baby’s heart rate and breathing will be monitored continuously if:
- He/she is on caffeine medication.
- He/she is less than 35 weeks gestation.
Cardiac (heart) monitoring will stop when caffeine has been discontinued for 48 hours and no further bradycardias have been seen.
Respiration monitoring with an apnoea monitor will continue until 35 weeks gestation. If there are no concerns with your baby’s breathing, this will stop too.

What happens if the monitor sounds?

- A nurse will observe your baby to see if he/she is breathing and if there is any change in colour or if the heart rate is changing.
- The nurse may stimulate your baby to remind him/her to breathe.
- If there is a change in colour, the nurse may need to give added oxygen.
- If the baby does not breathe, the nurse may give the baby a few breaths via bag and mask or extra help with breathing may be needed from a ventilator (breathing machine)

Do babies stay in hospital until apnoeas and bradycardias go completely?

Yes. Your baby will not be discharged if he/she still having any apnoeas and bradycardias. He/she would need to be off all medication and monitoring related to these. Some babies are candidates for home apnoea monitoring, these being:

- Those still requiring added oxygen on discharge.
- Where the consultant feels it is a good idea for your particular baby ie previous medical history.

Once apnoea has gone away, will it come back?

Apnoea of prematurity is a result of immaturity. Once a baby matures it will resolve.

Is apnoea of prematurity related to Sudden Infant Death Syndrome (SIDS)?

No, these are two entirely different problems. Many babies who die from SIDS have a normal newborn period. Babies who have needed neonatal intensive care for any reason are at a slightly higher risk of SIDS than any other baby. Apnoea of prematurity alone does not increase thier risk.

This leaflet is to give you information. If you have any questions or concerns reguarding this please ask a member of staff.

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