Greenwich Hospital

What is Apnea of Prematurity

PATIENT/FAMILY INFORMATION SHEET

What is apnea of prematurity?

Apnea is a pause in breathing that lasts more than 20 seconds in premature babies. It occurs because these babies have immature respiratory centers in the brain. Apnea most commonly happens when the baby is sleeping. The following are the most common symptoms:

- Pale/blue colored lips
- Absence of chest movement
- Heart rate less than 80 beats per minute
- Oxygenation level in the blood less than 85%
- A staring gaze
- Limp appearance of the body

How do I know if my baby has apnea?

In the newborn intensive care unit your baby's heart rate, respirations and oxygen levels are monitored continuously by specialized equipment. An alarm may sound for various reasons. The nurse will observe your baby to see if there are any changes or cause of the alarm. Sometimes the alarm may sound if the baby is moving or crying. If your baby has an episode of apnea, the nurse may stimulate your baby to breath by touching or rubbing your baby's back.

How is apnea in prematurity treated?

When apnea occurs, your baby's nurse or doctor will stimulate the baby by rubbing the back, arms, and legs to remind him to breathe again. Specific treatment for apnea of prematurity will be determined by your baby's doctor based on your baby's gestational age, overall health, and medical history. Your baby may be treated with one or more of the following:

- Continuous monitoring of breathing, heart rate and blood oxygen levels
- Medications that stimulate breathing, such theophylline or caffeine
- CPAP or continuous positive airway pressure, which is air or oxygen delivered under pressure through little tubes into the baby's nose
- Sometimes mechanical ventilation (respirator) is needed

Will apnea of prematurity go away?

As your baby gets older, his breathing will become more regular. The time course is variable. Usually apnea of prematurity markedly improves or goes away by the time babies reach 36 weeks of gestation.

Most infants recover from their apnea completely before they go home. Some babies will go home with home apnea monitoring.

Parents and caregivers will also be trained in infant CPR; though it is unlikely they will ever have to use it.

Will I need to make any special arrangements for home apnea monitoring?

- Call your local fire department or rescue squad to alert them that home apnea monitoring will be in use. If you ever need to call 911, the response team will be more prepared if they already have this information.
- Contact your local electric company to alert them of home monitoring use.
 They may be able to alert you of scheduled power outages for electric repairs. They may also recommend a backup generator to keep your baby's apnea monitor running during power outages.

Once apnea goes away, will it come back?

Apnea of prematurity is usually a result of immaturity. Once a baby matures and the apnea resolves, it will not return. If a baby should have breathing pauses after apnea goes away, it is not apnea of prematurity. It is due to some other problem and needs to be discussed with your baby's physician.

Is apnea of prematurity related to sudden infant death syndrome (SIDS)?

Apnea of prematurity is not a risk factor of SIDS. Most babies who experience SIDS are born at term and have a normal newborn course.

Sources: American Academy of Pediatrics. Retrieved March 2006 from www.aap.org
Nemour's Foundation. Retrieved March 2006 from www.kidshealth.org
Neonatology on the Web. Retrieved March 2006 from www.neonatology.org

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