Anemia of Prematurity

Anemia is a condition where there are not enough red blood cells (*red cells)* in the blood. Red cells carry oxygen and delivering it to the rest of the body. Newborns normally have a slow drop in the amount of red cells over the first two months of life. This is called normal (*physiologic*) anemia. The baby's body starts to produce red cells, slowly correcting the anemia. The amount of anemia found in physiologic anemia usually is much worse in premature infants.

CAUSES

Red blood cells wear out after a period of time. As they break down, the iron found in red cells is recycled to make new red cells. The newborn normally starts making red blood cells by the time they are 6-8 weeks old. Until then the red cells that are lost are not replaced.

Premature infants develop anemia that is more severe than that of term infants because:

- Red cells in premature infants have a short time before they wear out
- Premature infants lose blood due to numerous blood tests taken to monitor problems of prematurity
- Premature infants do not make blood cells as efficiently as full term infants.

SYMPTOMS

If the anemia is very mild, there may be no symptoms.
The most common symptoms of anemia in premature infants include:

- Poor weight gain.
- Difficulty feeding.
- Pale skin.
- Rapid heart rate.
- Decreased activity.
- Apnea (breathing stops for periods of time).

DIAGNOSIS

Diagnosis of anemia is made by blood tests that measure the amount of red cells in the blood. Other tests may be run to rule out other causes of anemia and to check on if the baby is already making new red cells.

TREATMENT

To prevent the anemia from getting too severe most centers limit the number of blood tests. Diet supplements of specific vitamins and iron also can help.

The timing and amount of treatment depends upon how bad the anemia is. It also depends on how premature the infant is. The baby's overall condition and symptoms need to be considered also.

Red cell transfusions may be used to treat anemia of prematurity. There is also a medicine that can be given to treat anemia and sometimes avoid transfusions.

HOME CARE INSTRUCTIONS

Be sure to give vitamins and iron supplements as prescribed
Follow through with blood tests and office visits recommended by your baby's caregiver.

SEEK MEDICAL CARE IF:

Your baby has signs that the anemia may be returning. Watch for:

- Pale skin
- Easy tiring
- Poor feeding
- Excessive sleepiness

SEEK IMMEDIATE MEDICAL CARE IF:

Your baby's breathing is very fast or labored.

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