



NEWBORN EMERGENCY TRANSPORT SERVICE: INFORMATION FOR PARENTS

Hyaline membrane disease
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HYALINE MEMBRANE DISEASE

What is Hyaline Membrane Disease (HMD)?

Hyaline membrane disease is also called respiratory distress syndrome (RDS).

It is caused by the lungs being immature and not making enough surfactant. Surfactant is like a soapy liquid which lines the lungs, preventing the air sacs in the lungs from collapsing when we breathe out. Babies who don't make enough surfactant have air sacs in their lungs that are stiff.

Which babies develop HMD?

HMD is most commonly seen in babies who are born more than 5 weeks early. However, a small percentage of babies who are born at term may also develop this problem.

How do we treat HMD?

The main treatment is to support your baby's breathing, by giving extra oxygen or continuous pressure via nasal prongs (CPAP). If your baby is not improving with this treatment, then we will place him on a breathing machine (ventilator) and give commercially-manufactured surfactant into his lungs.

We will also insert an IV line to give your baby antibiotics, sugar and fluids through his veins. Once your baby is getting better we will start milk feeding.

How long will my baby be sick?

This will depend on how early your baby has been born. Babies born very young (less than 27 weeks) may need help with their breathing for longer. Most babies over 32 weeks gestation who develop HMD can get worse in the first 2 days, but then slowly improve over the next 3 days. They are usually then able to breathe on their own, without any help.

Are there any complications?

Most babies with HMD respond very well to treatment. However, they are at risk of developing a pneumothorax (leak of air around the lungs.) This may require treatment with a chest drain. They are also more prone to having high blood pressure in their lungs that may require special medicine. Both these problems can make babies very sick.

Are there any long-term problems?

Babies born over 32 weeks gestation with HMD generally recover very well and do not have any major lung problems as they grow up.

Babies born very early (less than 27 weeks gestation) with HMD may develop chronic lung disease needing follow-up as they grow.

This information is intended as a guide only. If you have any concerns, please feel free to discuss with the NETS doctor retrieving your baby.