Chylothorax



What is chylothorax?

Chylothorax is a collection of lymph fluid (called chyle) in the space between the lung and the chest wall. This space is called the pleural space. The fluid in this space is normally clear. When lymph starts to drain, the fluid turns yellow and cloudy and can build up in this space.

Chyle:

- Comes from the lymph system. The lymph system is a system of vessels that help drain fluids from body tissues and increase the amount of fluid going to the heart.
- Is made up of important things like vitamins, minerals, proteins and white blood cells that fight infection.
- Can build up after eating foods with fat.
- Can leak into the space around the lungs from the main lymph vessel called the thoracic duct.

What causes it?

- Sometimes, the tiny, unseen lymph vessels get cut or damaged during chest surgery. This causes lymph fluid to leak into the pleural space.
- If pressures inside the heart are high, the chyle may also leak out on its own without any vessels getting cut.

Is it painful?

No, a buildup of chyle should not cause pain.

What are the possible symptoms?

Your child may have one or more of these:

- Breathing problems, such as shortness of breath
- Loss of blood protein
- Yellow, cloudy chest tube drainage (if your child has a chest tube in place)

Most often, chylothorax does not cause fever. Your child's care team will watch for and treat any signs of infection or protein loss if they happen.

What tests could my child have?

Your child may have one or more of these:

- Blood tests (labs) to check protein levels and other blood levels
- Chest X-ray to check for fluid around the lungs

In case of an urgent concern or emergency, call 911 or go to the nearest emergency department right away.

Chylothorax, continued

What is the treatment?

One treatment is to place a chest tube to drain the fluid.

- If your child has a chest tube after surgery, it will stay in place until the drainage becomes clear and nearly stops.
- This allows the lungs to expand and work well so your child can breathe easier.
- Having a chest tube can be painful, so your child can have medicine to help ease their pain.

Another treatment is to give your child a diet low in fats.

- If your child is a baby, they may be changed to a low-fat formula such as Enfaport or Tolerex.
 - Many babies do not like the taste.
 - If your baby will not drink the formula, your child's nurse may place a nasogastric (NG) tube.
 - The tube goes in the nose, down the back of the throat, and into the stomach.
 - The care team may give some or all of the formula through this tube.
- Your baby may need soybean oil as well as the low fat formula. Talk with the doctor or nutritionist learn more.
- If you can eat foods, a nutritionist can help you with food options for their low-fat or fat-free diet.
- Your child may need to stay on the special formula or diet for up to 3 months. Your child's doctor will let you know when your child can start eating regular fats again.
- If chyle continues to drain despite a low-fat or fat-free diet, your child:
 - May not be able to have anything to eat or drink.
 - May need special nutrition through an I.V. until the fluid stops building up.

Please ask your child's doctor, nurse or nutritionist if you have any questions or concerns.

This teaching sheet contains general information only. Talk with your child's doctor or a member of your child's healthcare team about specific care of your child.