

Let's Talk About...

Chylothorax

What is a Chylothorax?

A chylothorax (ky-low-thor-ax) is the build up of chyle (kile), a milky white fluid, in the space surrounding the lungs. This makes it difficult to breathe.

Chyle is a normal fluid produced in the bowel when we digest food. It is milky-colored when fatty food or drink is digested. The chyle fluid is carried around the body by lymphatic (lim-fat-ick) vessels. These are much like the network of blood vessels throughout your body. The lymphatic system carries fluid, fats, proteins, and infection fighting cells.

The lungs are surrounded by several layers of a protective lining called the pleura (plur-a) surround the lungs. Fluids can collect between the pleura layers (called the pleural space). A chylothorax happens when the lymphatic system starts leaking chyle fluid into the pleural space. The fluid pushes on the lung, making it hard to breathe.

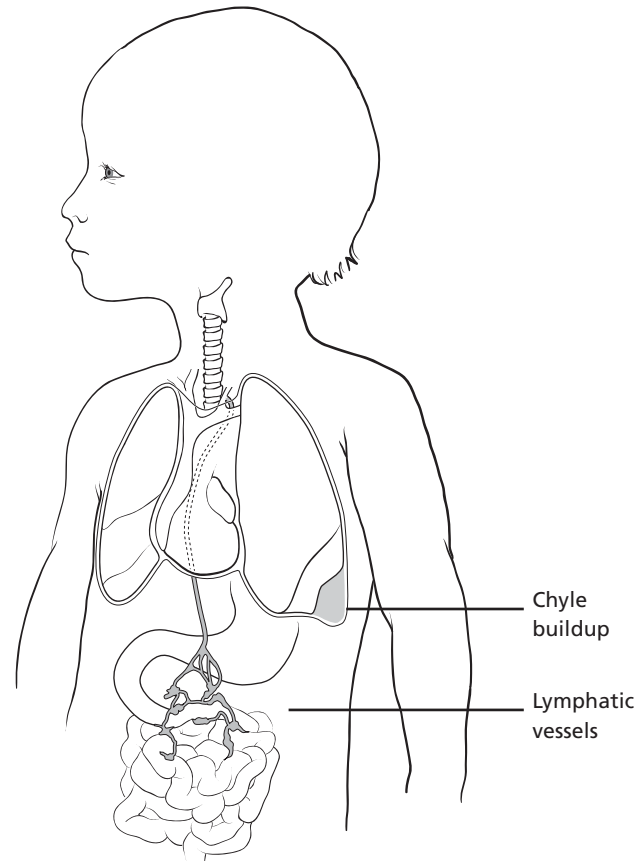
If your child had heart or chest surgery, a lymph vessel may have been injured by surgical instruments, or by muscles moving. Chest trauma, like a wound from an accident, or chest tumors can also cause lymph fluid to leak.

Chylothoraxes in newborn babies can be from other causes. Ask your nurse to talk with you about this.

How do you know it's a chylothorax?

A chest x-ray will show if there is a build up of this fluid in the pleural space.

Fluid from the pleural space is sent to the laboratory to be tested.



How do you treat a chylothorax?

Chest tube

Doctors can drain a chylothorax by using a temporary chest tube. See the handout Let's Talk About... chest tubes. Thoracentesis (thor-uh-sen-tee-sis) is another way to remove the fluid. With thoracentesis, a needle is inserted into the space around the lungs. The fluid is pulled out through the needle into a syringe.

If your child has a chest tube, the chyle will drain from the tube. Your child's nurse will measure the amount of fluid and document it on the chart. When the amount of chyle draining off has decreased or stopped, your child's chest tube will be removed.

Diet

Your child may be placed on a special diet. This will decrease the amount of chyle he produces and promote healing. This diet is called a medium chain triglyceride (MCT) diet. If your baby is breastfeeding, he will need to stop breastfeeding and eat a special formula, instead. Your child's doctor will let you know how long your child must stay on the MCT diet.

The kinds of foods your child may eat and the way you cook will probably need to change while he is on the diet. Foods included in the diet are fruits, vegetables, pasta, skim milk, and plain bread—no nuts, fried breads or fatty breads such as doughnuts or croissants.

Your child must not eat meat, egg yolks, cheese, most baby formula, milk products, breads, and desserts with a high fat content.

A registered dietitian will review this diet with you and help you put together a diet plan.

Are there complications with a chylothorax?

Sometimes the above treatments do not heal the chylothorax. In this case, there are other

treatment options. Your doctor will talk with you about these.

Call your doctor if. . .

- Your child has difficulty breathing or has shortness of breath
- There is any drainage from the surgical incision or chest tube site
- Your child has a temperature above 101°F that continues over an hour even after your child takes a fever reducer like acetaminophen (Tylenol®)

What do kids say about having a chylothorax?

Some children say that it is difficult to adjust to their new diet. They often cannot eat the foods that they like. Fortunately, they usually don't have to stay on this diet for long.



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