Chylothorax in Cats-Causes, Symptoms & Treatment

About

Chylothorax is a build up of a milky fluid known as chyle in the pleural cavity. Chyle is a highly fatty lymphatic fluid draining from the intestine. Normally, chyle is channeled through the tiny ducts from one lymph node to another and collects in the thoracic duct near the heart. The thoracic duct empties into the vena cava, the large blood-carrying vein that enters the heart. [1]

The pleurae are two membranes which surround the lungs. The parietal pleura is the outer membrane, which is attached to the chest wall, the inner one is known as the visceral pleura and is attached to the lung. In between these two membranes is the pleural cavity. The pleural cavity contains a small amount of pleural fluid which lubricates the pleural surfaces.

Some diseases cause a build-up of fluid which collects in the pleural space resulting in compression of the lungs. This build-up of fluid is known as pleural effusion. Different types of fluid can accumulate in the pleural space. Blood (hemothorax), pus (pyothorax), serous fluid (hydrothorax) and chyle (chylothorax).

Causes:

Trauma or obstruction of the thoracic duct which may be caused by heart disease, infectious disease, heartworm, cancer, diaphragmatic hernia or idiopathic (unknown cause).

Symptoms:

- Weight loss
- Shortness of breath due to pleural effusion
- Coughing
- Lethargy
- Blue-tinged mucous membranes
- Loss of appetite

Diagnosis:

Your veterinarian will perform a complete physical examination of your cat and obtain a medical history. He will also wish to find out the cause of chylothorax if possible. Some tests may include:

- X-ray – Fluid in the pleural space will be visible
- A needle aspirate some of the fluid, chyle is milky white in appearance
- Ultrasound – This to evaluate the heart and lungs
- Remove fluid and repeat x-rays to look for any masses or evidence of heart disease

It is also important to determine the underlying cause, such as:

- Heartworm test
- FeLV blood test

**Treatment:**

Where possible, treat the underlying cause:

- Thoracentesis – Remove the fluid from the pleural cavity to relieve pressure.
- Rutin is a drug from the benzopyrone family and is readily available at health food stores may be of assistance. [2] The exact mechanism is unknown at this stage but it is proving to be of benefit to cats with chylothorax. For more information on rutin, read here
- Surgical options may be necessary for cats with idiopathic chylothorax who fail to respond to medical management.
- Surgery of the thoracic duct (thoracic duct ligation).

**References:**
