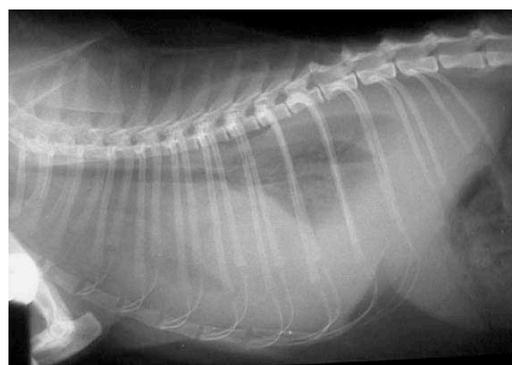


Chylothorax

Chylothorax is the accumulation of chyle in the thoracic cavity. Chyle is lymphatic fluid arising from the intestinal tract which contains a high concentration of fat. Chyle is normally transported by the lymphatic system and in the thoracic cavity it is known as the thoracic duct. Chylothorax is a poorly understood disease with serious consequences. It can occur in both dogs and cats. There are some diseases that can produce chylothorax such as a lung lobe torsion or heartworm disease, but usually there is no underlying cause (idiopathic).



Clinical signs associated with this disease include difficulty breathing, coughing, and exercise intolerance. Your pet will have chest radiographs performed which will reveal effusion (fluid) in the thoracic cavity.



Normal cat thorax (left) and thorax filled with fluid (right)

The next step may include an ultrasound of the chest to look for any potential cause for the fluid. (e.g. heart disease). A thoracocentesis will be performed to obtain a sample of the fluid. Chylous fluid appears like “strawberry milk”. This sample is then sent off to a laboratory to evaluate the levels of triglyceride and cholesterol to confirm the diagnosis of chylothorax. The triglycerides are always higher in the fluid than in the serum and the cholesterol could either be the same or lower than the serum.

Treatment options include medical or surgical management. Surgical management is usually strongly recommended due to the effects that chyle has on the lung tissue. Medical treatment includes repeated thoracocentesis and treatment of any underlying disease processes. Rutin has recently been used as a therapeutic option but with disappointing results.

Surgical management is the recommended treatment choice. Surgery includes a thoracotomy, thoracic duct ligation, and a pericardectomy. The success rate since the addition of the pericardectomy in dogs is >80%.

In cats, this disease still has a guarded prognosis even with surgical correction. This is most likely due to the fact that cats are solitary independent animals that are able to hide or disguise the clinical signs for longer durations than dogs. This results long term exposure of the lungs to chyle which damages the lung tissue. The lungs become fibrotic or scarred and can no longer inflate properly to reach the demands of the body for oxygen. This is known as constrictive or fibrosing pleuritis. The chylothorax may resolve, but the lung tissue cannot repair itself or compensate which leads to some of these cats doing very poorly after surgery. If the disease is diagnosed early in cats, the success with surgery ranges between 60 and 80%.

After surgery your pet will be hospitalized for several days. They will have a thoracotomy tube in place to allow for continued drainage of any chyle or fluid postoperatively. Gradually, the fluid will begin to decrease and the tube will be removed. Most pets will need a few weeks of rest to allow the chest to heal properly. Most dogs and cats can return to a normal life if surgery is successful.