

Chylothorax in a cat

A 10-year-old male cat was presented with severe dyspnoea of fairly recent onset. Thoracocentesis was performed for therapeutic as well as diagnostic purposes and it revealed that a milky-white fluid had accumulated in the thorax. Either chylothorax or pseudo-chylothorax was suspected. The fluid did not clear when centrifuged, as fluids resulting from other aetiologies would have done, but this test did not differentiate chyle from pseudochyle.

Samples of serum and of the thoracic effusion were submitted to a laboratory for determination of cholesterol and triglyceride values (Table 1).

These values indicated true chyle, since compared to normal serum values the effusion contained high levels of triglyceride, while cholesterol was within normal limits. Pseudochyle is indicated by normal triglyceride values and elevated cholesterol in comparison to serum¹. When the effusion was refrigerated and allowed to stand overnight, a cream-like layer formed, another feature that distinguishes chyle from pseudochyle. Finally, when ether was added to the effusion the milkiness dissipated and the fluid became clear (Fig. 1).

Thoracic radiographs were diagnostically uninformative owing to the considerable amount of fluid in the thoracic cavity, even after thoracocentesis. Since the owner refused surgical intervention, the cat was treated conservatively. After the thorax had been drained, the cat was breathing normally and was discharged. It was placed on a low-fat diet (Hills r/d), amoxicillin tablets (Clamoxyl 40, Pfizer) and sodium pentosan polysulphate tablets (Tavan-SP, Ethimed), the last since it is claimed to be beneficial in cases of hyperlipidaemia.

Nine days later the cat returned with severe dyspnoea. Thoracic drainage was again performed, and in addition to the

above medication, furosemide was administered (Puresis, Pharmacare).

Twenty-one days later the cat returned with dyspnoea and there was marked loss of condition. The owner requested euthanasia. At necropsy, no intrathoracic neoplasms or lesions of the thoracic duct were revealed. Multiple white intrathoracic nodules approximately 2 mm in diameter were, however, observed.

Histopathological examination revealed that these nodules consisted of masses of lymphocytes and macrophages, which were considered to consti-

tute an inflammatory response (G Louw, Department of Anatomy and Cell Biology, Medical School, University of Cape Town, pers comm.).

Since the aetiology of this case of chylothorax could not be determined, it must be regarded as idiopathic².

REFERENCES

1. Allen D G 1991 *Small animal medicine* (1st edn). J B Lippincott, Philadelphia.
2. Ettinger S J, Feldman E C 1995 *Textbook of internal veterinary medicine* (4th edn). W B Saunders, Philadelphia.

Table 1: Cholesterol and triglyceride values (mmol/l) in serum and thoracic effusion.

	Cholesterol	Triglyceride
Effusion	3.90	6.30
Serum	2.20	0.40
Serum normal range	1.80–3.90	0.60–1.10

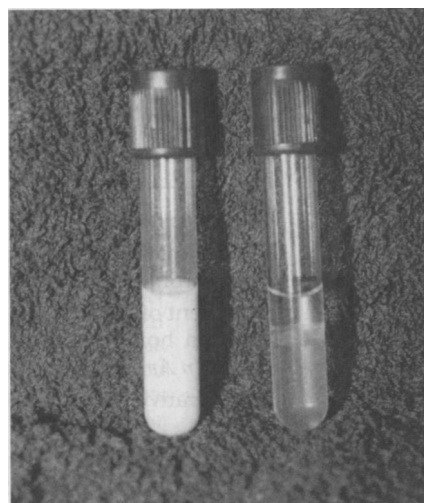


Fig. 1: Milky-white chyle (left) becoming clear (right) after the addition of ether.