

Diagnosis of the Thoracic Duct Rupture Using CT Lymphangiography in an Afghan hound

Jinhwa Chang, Joohyun Jung, Woo-sung Jung¹, Sunkyoung Oh, Cheol-young Hwang¹,
Dongwoo Chang², Junghee Yoon, Mincheol Choi*

*Department of Veterinary Radiology, College of Veterinary Medicine,
Seoul National University*

¹*Department of Veterinary Internal Medicine, College of Veterinary Medicine,
Seoul National University*

²*Department of Veterinary Radiology, College of Veterinary Medicine,
Chungbuk National University*

Lymphangiography gives precise information on the extent and location of lymph vessels and lymph nodes, and is a particularly useful method for evaluating the integrity of the thoracic duct in dogs with chylothorax. It was recently reported that percutaneous ultrasound-guided popliteal lymphangiography using computed tomography (CT) or radiography is more relatively non-invasive, simple and rapid technique compared to existing various methods.

A six-year-old, intact female, body weight 23 kg, Afghan hound was referred with respiratory distress. It was identified as chylothorax though thoracic radiography and cytology. We performed CT lymphangiography through direct injection of contrast media (60~90 mgI/kg, Omnipaque[®]) at the popliteal lymph node using ultrasound-guided procedure. Extravasation of contrast media into the pleural cavity at the thoracic duct at the level of the 4th and 5th thoracic vertebrae was clearly observed on CT.

Rupture of the thoracic duct in this patient can be accurately diagnosed with CT lymphangiography, which allows enhanced visualization of lymphatic system, especially thoracic duct system and indicates the exact location for surgical repair.

* Corresponding author: mcchoi@snu.ac.kr