Clinical application of lymphography in three dogs with regional lymphedema

Taehun Kim, Hyeyoung Chun, Sungyoung Han, Gonhyung Kim, Dongwoo Chang*

Department of veterinary radiology, Veterinary medical center, College of Veterinary Medicine, Chungbuk National University

Introduction: Lymphography is a type of diagnostic testing technique in which injection of a contrast medium into the lymph node is used to visualize the lymph node an d relating lymphatic circulation. This report describes clinical application of lymphography in

three dogs.

Methods: Lymphography were performed by injection of water-soluble iodinated contrast media(0.2mg/kg) in patients that is doubted by lymphedema in three patients. Contrast medium was injected under the guidance of ultrasonography into popliteal lymph nodes of two dogs with hind limb lymphedema and submandibular lymph node with one dog with cervical lymphdedma and serial fluoroscopic and radiographic observation was done.

Results: Cervical region lymphography showed torturous and obstructed lymphatic duct and enlarged cervical lymph node which turn out to be a multicentric lymphoma in necropsy. Two cases of popliteal lymphography showed enlarged tortuous lymphatic ducts and sublumbar lymph node and these were presumed to be caused by inflammation of pelvic cavity or peritonial cavity.

Clinical relevance: Direct injection of contrast media into a lymph node appears to be a feasible technique for identification of lymphatic drainage and patency and this technique can be applied to find out whether the lymphatic system is responsible for the regional pitting edema or not.

Key words: dog, lymphography, ultrasonography, lymphedema

* Corresponding author. E-mail: dwchang@cbnu.ac.kr