

Localization of chyle leakage site in postoperative chylothorax by oral administration of I-123 BMIPP

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The authors present a 71-year-old woman who had a right chylothorax after right upper lobectomy for lung cancer. As the chylothorax was considered to be due to thoracic duct injury at the time of operation, lymphoscintigraphy was performed by oral administration of I-123 beta-methyl-iodophenyl pentadecanoic acid (BMIPP). After visualization of the stomach and intestine, abnormal accumulation of the radiotracer was found initially around the right pulmonary hilum and then spread laterally in the upper pleural cavity, indicating chyle leakage in the region of the right pulmonary hilum. Scintigraphic finding was well correlated with the subsequent thoracoscopic observation, showing chyle leakage from a lymphatic tributary near its confluence to the thoracic duct at the level of the azygos continuation. The disruption site was ligated by video-assisted-thoracoscopic-surgery procedure with successful termination of the chyle leakage. Lymphoscintigraphy by oral administration of I-123 BMIPP is thought to be a useful method for localization of chyle leakage in patients with chylothorax induced by thoracic surgery.

Key words: chylothorax, lymphoscintigraphy, I-123 BMIPP, oral administration