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THE LYMPHATIC DRAINAGE OF THE PARIETAL PERICARDIUM IN MAN

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ABSTRACT

Parietal pericardial lymphatics were visualized by indirect and direct India ink injections in 35 human cadavers. Studies included examination of cleared specimens under the dissecting microscope and standard light microscopy.

The lymphatic vessels of the ventral pericardial surface most often pass along the phrenic nerves cranially to terminate in the anterior right and left and transverse mediastinal nodes, or caudally to the diaphragm or prepericardial lymph nodes. The lymphatics draining the lateral parts of pericardium pass to the anterior mediastinal, tracheobronchial, lateropericardial, prepericardial and posterior mediastinal (juxtaesophageal) lymph nodes. The posterior part of the pericardium drains to the juxtaesophageal and tracheobronchial nodes. Lymphatics from the diaphragmatic part of the pericardium pass to the right lateropericardial and prepericardial, juxtaesophageal and tracheobronchial nodes. The pericardial cupula is anteriorly drained to the anterior mediastinal nodes, and posteriorly to the tracheobronchial nodes. In cleared specimens two networks of lymphatic vessels are seen to surround the pericardial space. On the ventral surface, the lymphatics of the parietal pericardium connect to lymphatics in the pericardial fat and areolar tissue. On the lateral and posterior surfaces, the lymphatics of the parietal pericardium anastomose with lymphatics of the reflected mediastinal pleura. These anatomical observations offer new insights into the mechanisms of turnover of pericardial fluid and into the mechanisms of occurrence of chylopericardium.