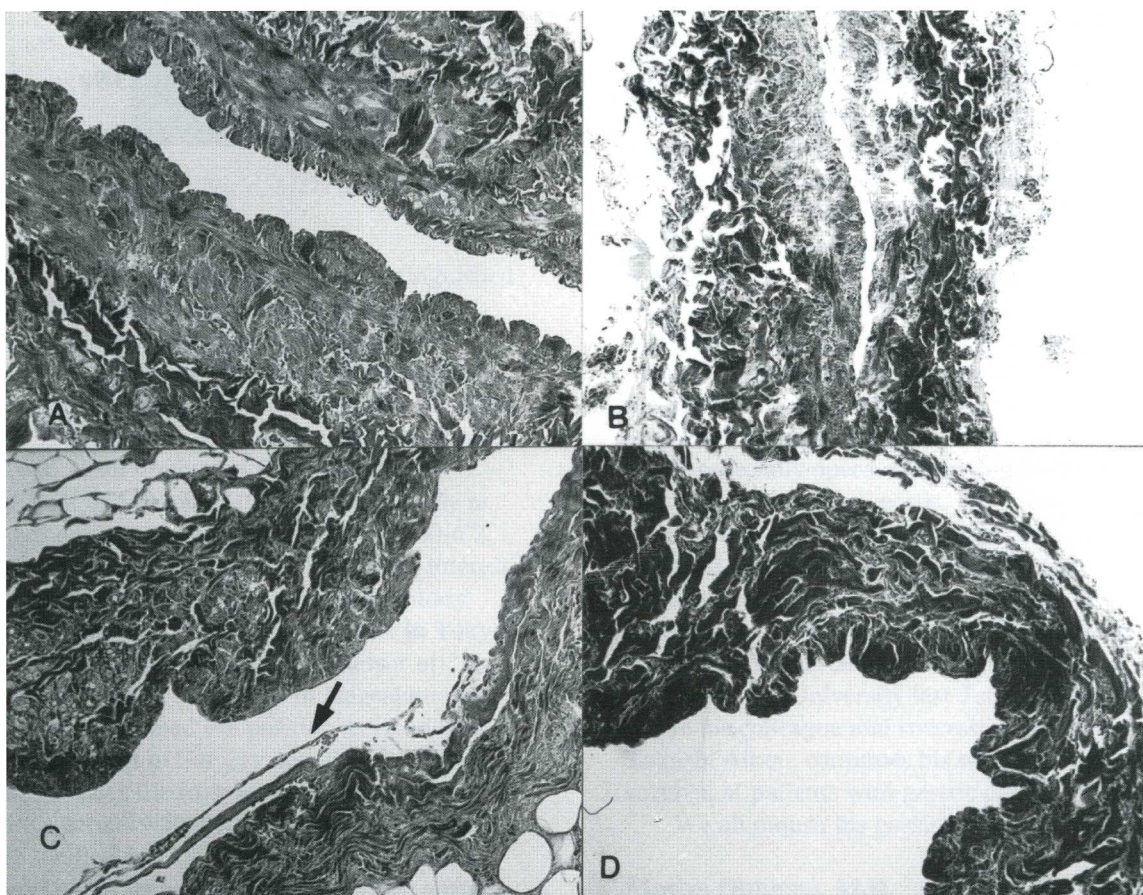


LYMPHOGRAPHIA**LIGHT MICROSCOPY OF THE HUMAN THORACIC DUCT**

C. Fernando de Sousa Rodrigues, M. de Jesus Simões, J.C. Prates, E. Olave

Departments of Anatomy of Federal University of Alagoas (CFSR), Federal University of São Paulo (MJS,JCP), and University of Frontera (EO), São Paulo, Brazil



Photomicrographs of three segments of the thoracic duct: Abdominal (A), thoracic (B), and cervical (C). Note the gradual diminution in muscle thickness of the thoracic duct from abdomen to neck but nonetheless its uniformly greater muscle component compared to an adjacent subclavian vein. Note the intraluminal valve (arrow) in C representing an extension of the lymphatic endothelium and distinct from the thoracic duct wall itself. (Masson Trichrome; x180).

In six adult male cadavers (20-55 years) during autopsies at the Maceio Legal Medical Institute in Alagoas, Brazil, segments were taken of the thoracic duct including a portion from the abdomen, middle third within the chest and left neck. Separate vascular segments were also taken from the internal jugular, subclavian, and brachiocephalic veins and the carotid artery. The specimens were transversely sectioned, fixed in 10% formaldehyde, and prepared for routine histology in the Department of Morphology of UNIFESP.

The abdominal portion of the thoracic duct displayed the most prominent muscle layer (*Fig. 1A*). As the central portion of the thoracic segment was approached, there was a notable diminution in the muscle layer of

the thoracic duct (*Fig. 1B*), which became even more attenuated in the cervical segment (*Fig. 1C*). Although the thoracic duct was consistently less muscular than the adjacent carotid artery, it was uniformly thicker and more muscular than the internal, subclavian, or brachiocephalic veins.

These findings are compatible with a gradual gradation of contractile activity within the thoracic duct that probably represents the major force propelling lymph cephalad.

**Prof. Dr. Célio Fernando de Sousa
Rodrigues**
Disciplina Anatomia Topográfica
Rua Botucatu, 740, Vila Clementino
São Paulo, S.P.-Brasil; Cep.: 040.23-90