

Elastic artery (histological slide)

Histological description

The wall of an elastic artery consists of three basic layers: *Tunica intima* , *T. media* , *T. adventitia* , examples of elastic arteries are large arteries (**Aorta**, **A.subclavia**, **Arteria carotis communis** and others.).

Tunica intima

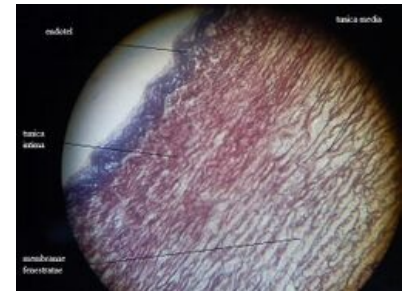
Endothelium (single-layer squamous epithelium), lamina elastica interna.

Tunica media

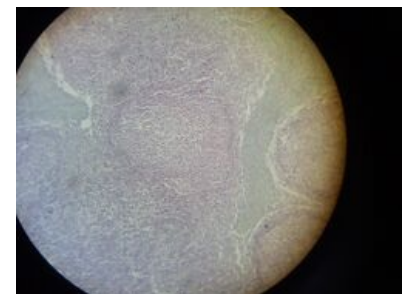
In this layer, parallel arranged elastic membranes (light in HE staining) and layers of smooth muscle (dark) alternate, smooth muscle cells have a nucleus in the center (visible only at maximum magnification), lamina elastica externa is difficult to distinguish.

Tunica adventitia

It contains numerous *vasa vasorum* .



Aorta longitudinally. This stain (Wiegert's resorcin-fuchsin) stains elastin dark purple. This will highlight the elastic membranes.



Aorta transversely

Links

Related articles

- Muscle artery (histological preparation, WRF)
- Muscular artery (histological slide, HE)
- Vein (histological slide, HE)

Bibliography

- MUDR. EIS, Václav – MUDR. JELÍNEK, Štěpán – MUDR. ŠPAČEK, Martin. *Histopatologický atlas* [online]. ©2006. [cit. 15.04.2010]. <<http://histologie.lf3.cuni.cz/histologie/atlas/index.htm>>.
- JUNQUIERA, L. Carlos – CARNEIRO, José – KELLEY, Robert O.. *Základy histologie*. 1. edition. Jinočany : H & H 1997, 1997. 502 pp. ISBN 80-85787-37-7.