

ECVP/ESVP Summer School in Veterinary Pathology

Summer School 2016 – Mock Exam

3. Tissue from a Horse

Large muscular artery.

Protruding into the arterial lumen, and adherent to the arterial wall, is a voluminous mass of eosinophilic fibrillar material (**fibrin**) containing blood leukocytes, mainly degenerate / necrotic neutrophils, and red blood cells: fibrinoleukocytic **thrombus**, with refringent hyperbasophilic extracellular crystals (**calcification**). The arterial endothelium is lost. The luminal thrombus contains a few 500-µm to 1-mm-diameter, round to oval, **metazoan parasites** showing an external 10-micrometer-thick smooth amphophilic **cuticle**, a thin **platymyarian musculature**, as well as prominent **vacuolated lateral chords** and a central **intestine** (simple columnar epithelium with **prominent brush border**) (**nematode larvae**). Underlying the thrombus and extending in the arterial media, is a 200-500 micrometerthick rim of fibrous connective tissue (**intimal fibrosis**) with lightly basophilic (myxoid) ground substance, containing a moderate amount of **lymphocytes**, **plasma cells**, few macrophages and neutrophils, **eosinophils** and **hemosiderin-laden macrophages**. Vasa vasorum show moderate intimal thickening by intimal **fibrosis** and occasional **thrombosis** with fibrin organization and partial occlusion.

Morphologic diagnosis / diagnoses

Large muscular artery: focally extensive severe **chronic (0.5) arteritis (1)** with **thrombosis (0.5)** and intralésional **nematode larvae (1)**.

Etiology / Etiologies: *Strongylus vulgaris* larvae

Marks

Muscular artery	1
Thrombus	1
Fibrin with description	1
Neutrophils	0.5
Calcification	0.5
Absence of endothelium left	0.5
Nematode larvae	1
Size in micrometers	0.5
Cuticle	1
Platymyrian musculature	1
Vacuolated lateral chords	1
Intestine with prominent brush border	1
Lymphocytes and plasma cells	1
Eosinophils	0.5
Hemosiderin-laden macrophages	0.5
Intimal fibrosis	1
Vasa vasorum: intimal fibrosis or thrombosis	1
Morphologic diagnosis	3
Etiology	1
Design	2