



ECVP/ESVP Summer School in Veterinary Pathology

Summer School 2010 - Mock Exam Case 3

Tissue from a Chicken Trachea

The lumen is filled with hemorrhage, fibrillar eosinophilic material (fibrin), and large numbers of granulocytes. Small numbers of multinucleate giant (syncytial) cells are noted immediately overlying the epithelium. Epithelial cells are cuboidal or flattened and most lack cilia; numerous individual and clusters of epithelial cells are detached, detaching or necrotic. Numerous intranuclear, 1-4 micron diameter, eosinophilic inclusion bodies are noted within both mucosal epithelial cells and syncytial cells, with margination of the nuclear chromatin. In the lamina propria and submucosa there are moderate infiltrates of plasma cells, lymphocytes and heterophils; many of the inflammatory cells have pyknotic or fragmented nuclei. There are multifocal deposits of fibrin in the lamina propria, and some superficial blood vessels are occluded by similar material (thrombi). Blood vessels are dilated and filled with erythrocytes (hyperemia). Small numbers of lymphoid cells are infiltrating the interstitial tissue of skeletal muscle tissue of the tracheal wall. Some blood vessels in the skeletal muscle contain thrombi, and there are a few extravascular deposits of fibrinous material.

Morphologic diagnosis / diagnoses

Severe, acute (chronic-active), diffuse **necrotizing tracheitis** with **syncytial cells** and intranuclear **inclusion bodies** consistent with Herpesvirus inclusions.

Etiology / Etiologies

Gallid herpesvirus type 1

Name of the disease

Infectious laryngotracheitis

Marks

Trachea	1
Lumen of the trachea	
Heterophilic granulocytes	1
Macrophages	0.5
Syncytial cells	1
Fibrin	1
Erythrocytes	
Epithelium: sloughing, disintegration, or necrosis	1
Epithelium: flattened cells without cilia	0.5
Viral inclusion bodies	
intranuclear	0.5





ECVP/ESVP Summer School in Veterinary Pathology

Summer School 2010 – Mock Exam Case 3

within syncytial cells	1
diameter (1 to 4 micrometers)	0.5
margination of chromatin	0.5
Subepithelial connective tissue	
Plasma cells	0.5
Lymphocytes	0.5
Heterophils	0.5
Pyknotic / apoptotic inflammatory cells	
Hyperemia	1
	0.5
Fibrin / thrombosis (within mucosa or muscle)	0.5
Morphologic diagnosis	
Etiology	
Name of the disease	
Style	1