Trachea of Peacock

2017-6-4

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Contributor:	University of Georgia College of Veterinary Medicine, USA
Signalment:	Adult, peacock, Pavo cristatus, avian
History:	The birds and others in the same flock had respiratory symptoms with rapid breathing and purulent ocular discharge.

Gross Pathology:	➤ Pasty to dry exudate in conjunctiva
	➤ Upon opening the carcass, the bird was found
	    • fair body condition,
	    • rough and crusty oropharynx,
	    • the crop was empty
	    • liver, kidney and lungs were congested

Laboratory results:	Positive Gallid herpesvirus-1 in oropharyngeal and tracheal tissues by PCR.
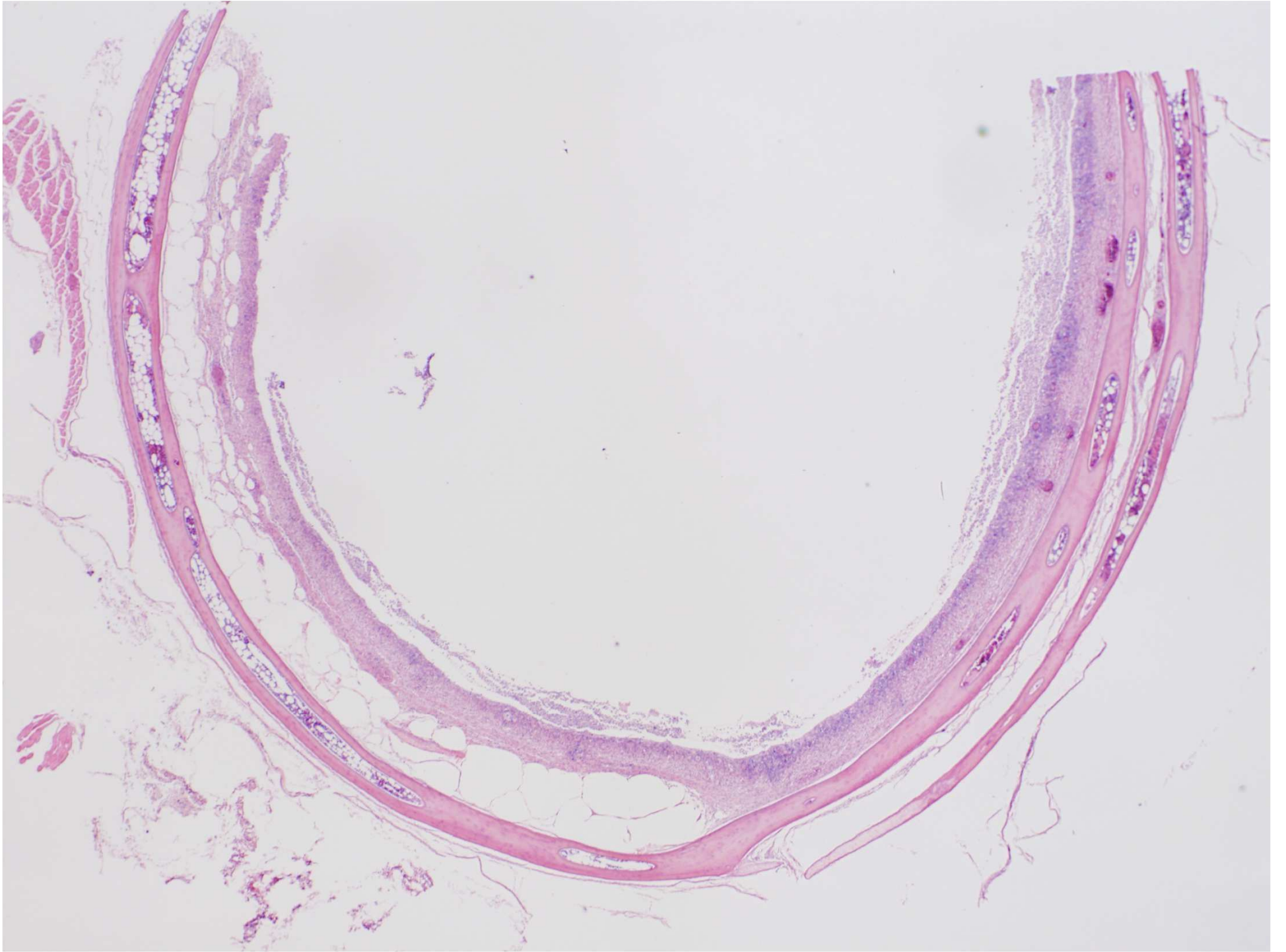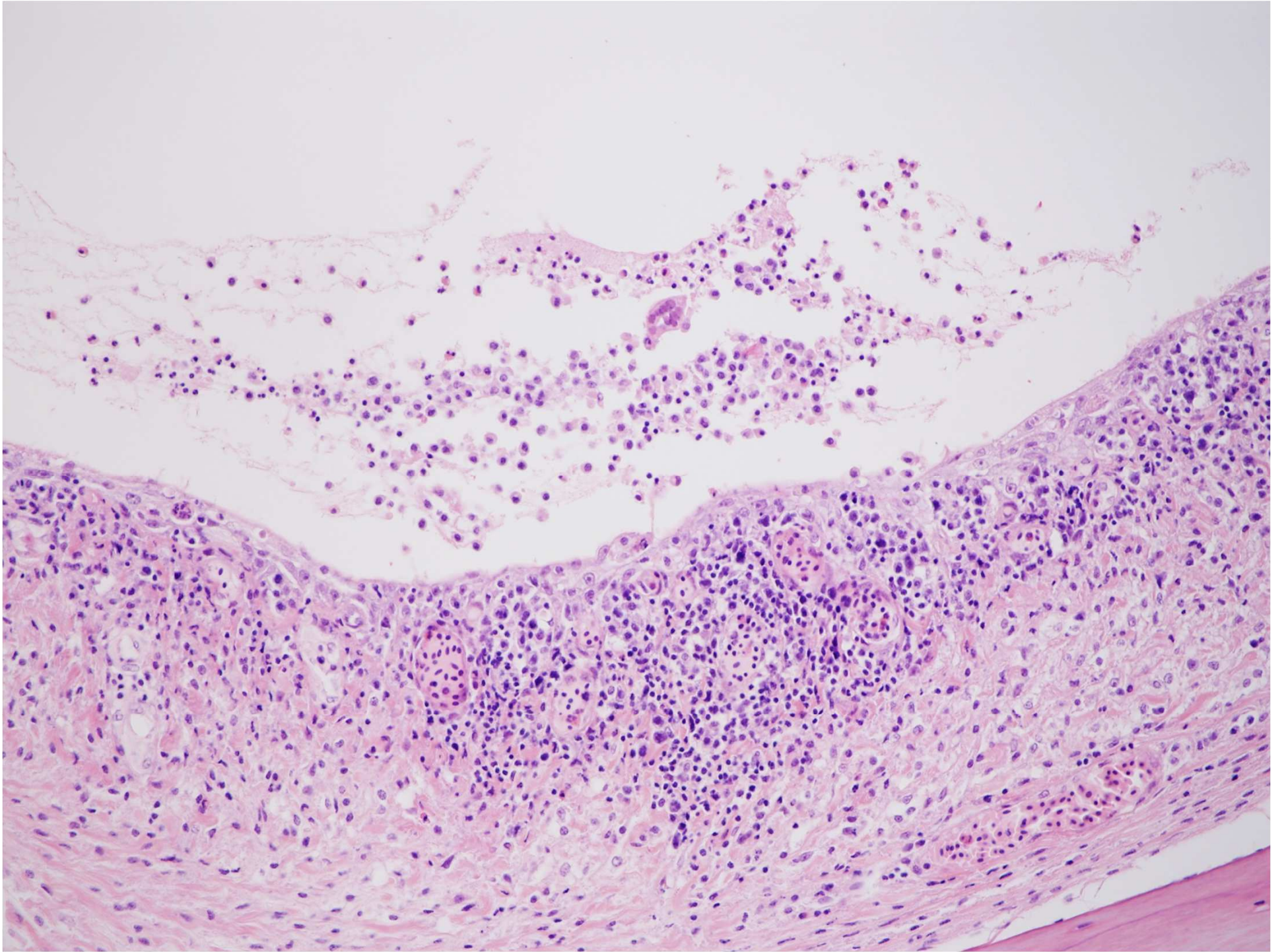
Inclusion body and syncytial cell
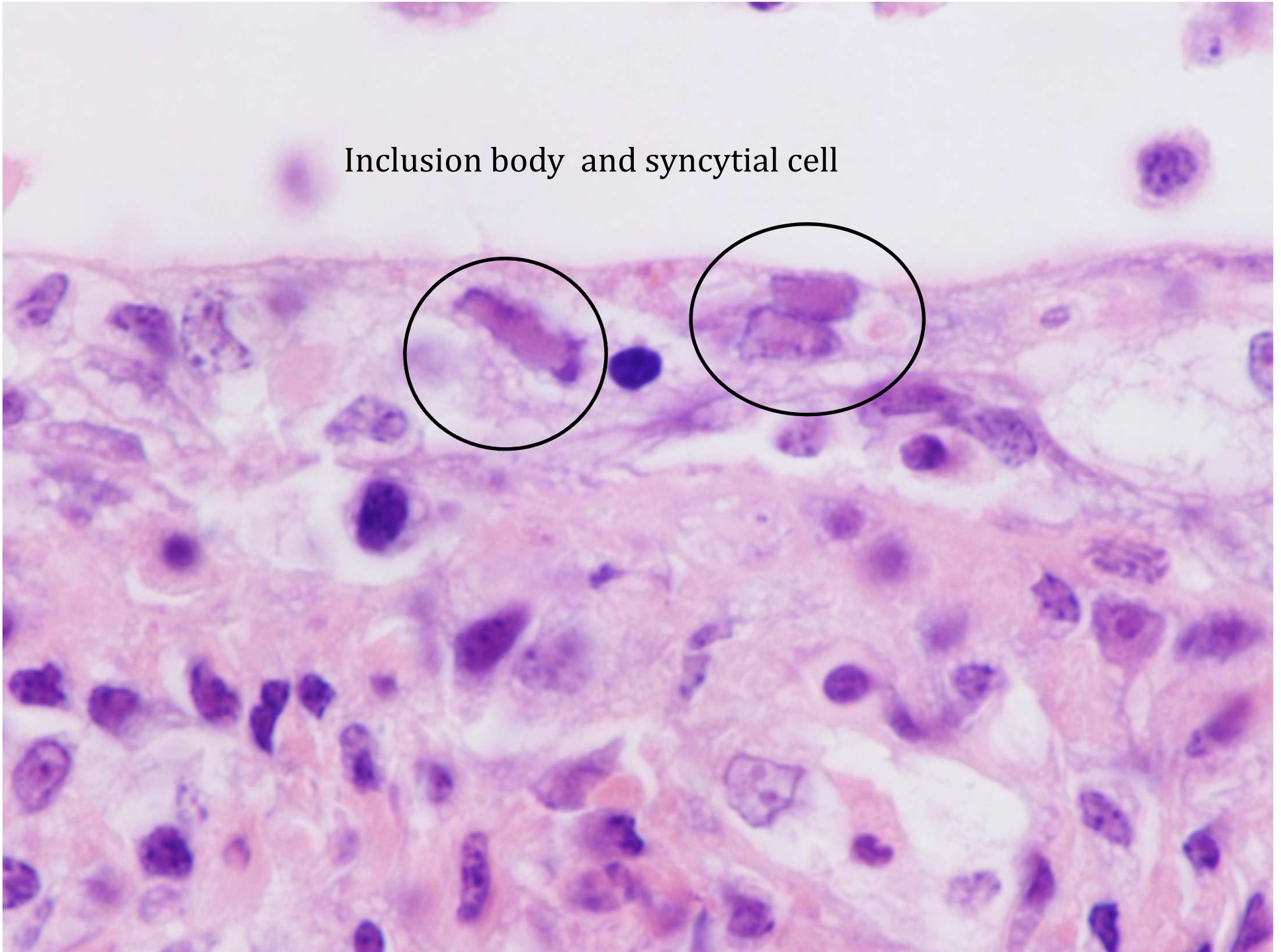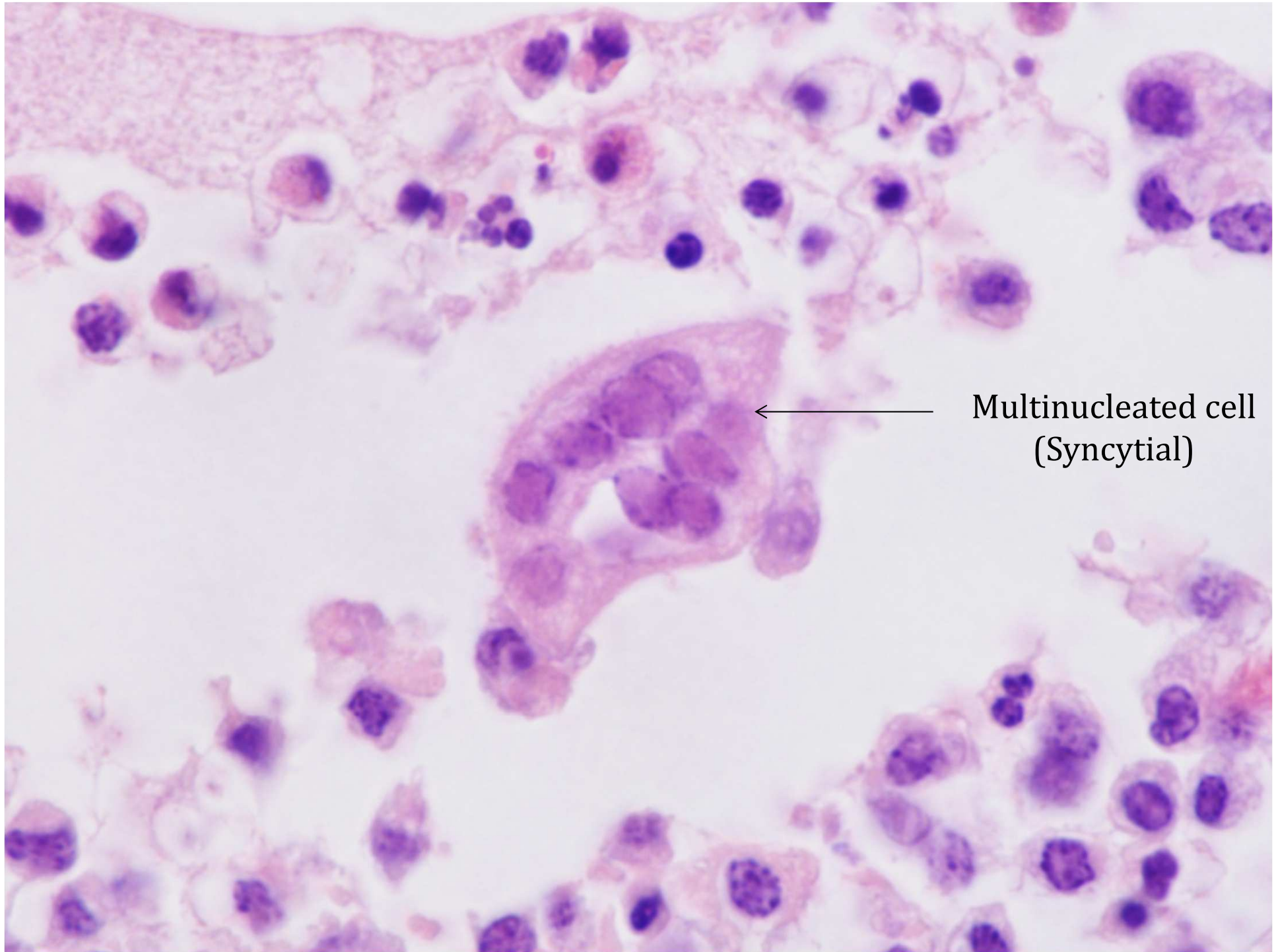
Multinucleated cell
(Syncytial)

Contributor's Diagnosis

Trachea and Larynx: Lymphoplasmacytic and heterophilic to pyogranulomatous tracheitis and laryngotracheitis with syncytial cells and intranuclear inclusion bodies.

JPC Diagnosis

Trachea: Tracheitis, necrotizing and lymphohistiocytic, circumferential, severe with multinucleated viral syncytia and intranuclear eosinophilic viral inclusions.

Contributor's Comment

Infectious laryngotracheitis (ILT)

- Acute, highly contagious respiratory disease

- Gallid herpesvirus-1

- Transmission is via respiratory and ocular route

- Chickens older than 3 weeks of age is more susceptible

- Gross lesions are observed in the larynx and trachea

Contributor's Comment

- Respiratory mucosa shows inflammation and hemorrhagic necrosis (severe form)

- A characteristic feature is intranuclear inclusion bodies in epithelial cells

- Epithelial cells form multinucleated cells (Syncytia)

- Laboratory diagnosis is required for confirm and distinguish from other diseases (IB,ND, AI, Infectious coryza and mycoplasma)

- Vaccine can create latent infected carrier

Conference Comment

Respiratory Tract Infections;

Diseases	Pathogen	Viral Inclusion body	Syncytial cell
IB	Coronavirus	-	-
ND	Paramyxovirus	-	-
Avian influenza	Type A influenza virus	-	-
Metapneumovirus	Metapneumovirus	-	-
Adenovirus	Adenovirus	+	-
Pox	Pox virus	+	-
ILT	Gallid herpesvirus -1	+	+
Infectious coryza	Avibacterium paragallinarium	Bacterial infection	
Mycoplasmosis	Mycoplasma gallisepticum		