



Lecture title: Feline Chlamydophila Disease

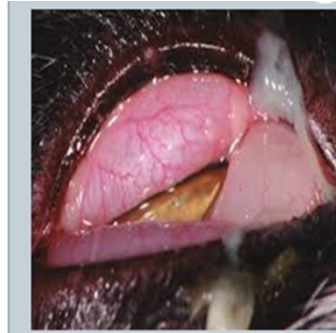
Lecturer Affiliation: Department of pathology and poultry diseases

Summary:

- › Feline chlamydial conjunctivitis is an infection caused by the bacterial organism *Chlamydophila felis*. The most common signs of chlamydia in cats involve the eyes or the upper respiratory tract (nose or throat) and can spread to the lungs if left untreated. and primarily causes conjunctivitis, (inflammation of the membrane lining the eyelid).
- › Although disease caused by *Chlamydophila felis* in cats has been referred to as feline pneumonitis, *Chlamydophila* rarely causes pneumonia in cats.
- › **How does a cat become infected with chlamydia?**
- › Because chlamydia lives inside cells of the body and is not able to survive for long in the environment, the spread of infection relies on direct or close contact with an infected cat.
- › **What are the clinical signs?**
- › Watery or yellowish discharge from one or both eyes Swelling and reddening of the conjunctiva Mild sneezing and nasal discharge Mild fever (occasionally) Lethargy (occasionally) The nictitating membrane (third eyelid in the inner corner of the eye) may protrude partially across the eye. One or both eyes may be affected.
- › Unilateral ocular disease may be seen initially, but this generally progresses to become bilateral. There can be intense conjunctivitis with extreme hyperaemia of the nictitating membrane, Ocular discharges are initially watery but later become mucoid or mucopurulent. Chemosis
- › (Chemosis is swelling of the eye surface membranes because of accumulation of fluid. This symptom is often related to an allergic response of the conjunctiva) is a characteristic feature of chlamydiosis.
- › Respiratory signs are generally minimal with *C. felis* infections but can include nasal discharge.
- › **Pathogenesis**
- › . The incubation period before clinical signs occur is generally 2-5 days,



- › **Chlamydia spp. target mucosal tissues and the primary target for *C. felis* is the conjunctiva. After uptake of the infectious elementary bodies, the elementary bodies develop into reticulate bodies, which are non-infectious and replicate by binary fission in a membrane-enclosed vacuole within the cytoplasm of the host cell, avoiding lysosomal fusion. The reticulate bodies then transition back into the elementary body form, which are released into the extracellular space after cell lysis to infect other host cells. The entire replication cycle takes about 2 days to complete although many cats remain well following infection. *C. felis* can also spread from the eye via the bloodstream to other organs such as the tonsil, lung, liver, spleen, intestinal tract and kidney.**



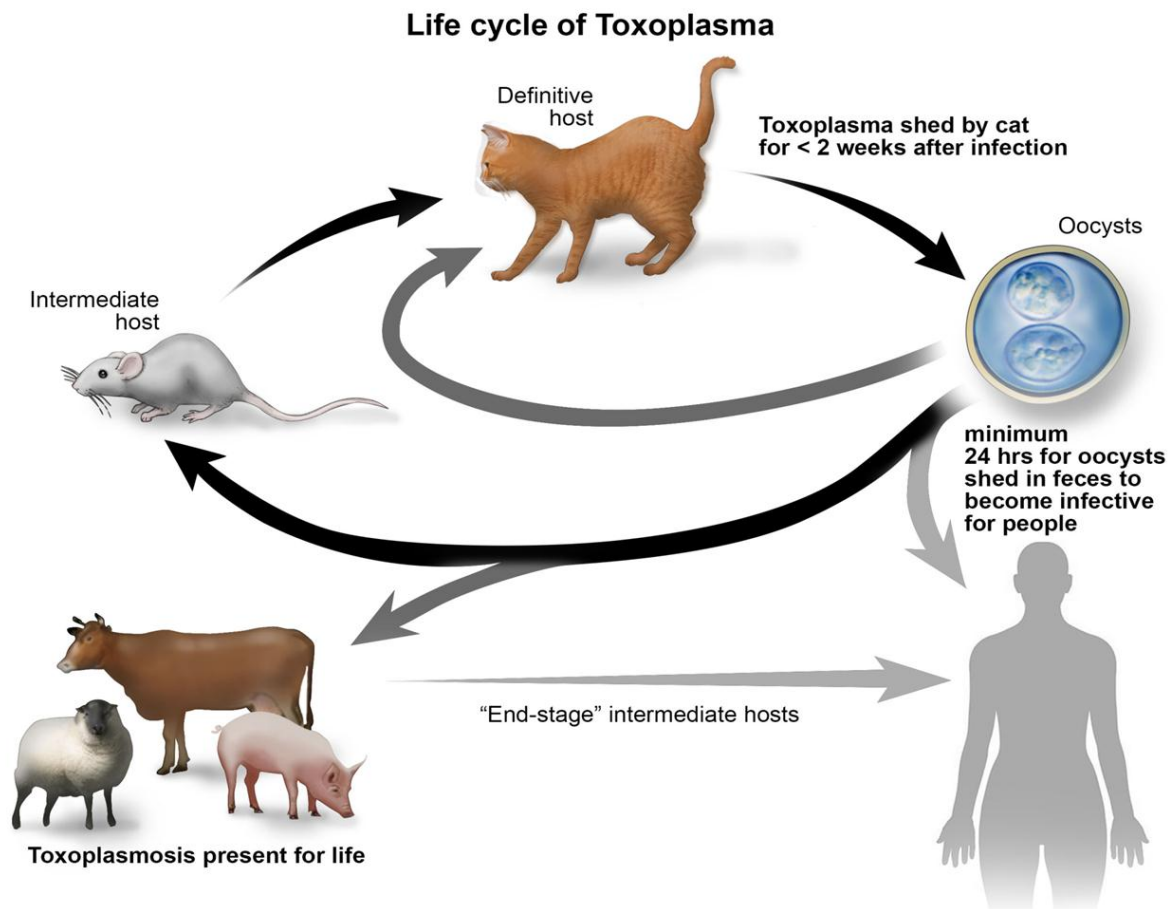
FELINE TOXOPLASMOSIS

Toxoplasmosis is caused by the protozoal parasite *Toxoplasma gondii*. It is a relatively common disease that is found worldwide in animals, birds, and even humans. The disease is generally mild, but given its zoonotic potential (meaning it can be transmitted to people), it is important to recognize its health implications.

What causes toxoplasmosis?

Toxoplasmosis is caused by infection with *Toxoplasma gondii* (*T. gondii*), a protozoal parasite that can be transmitted between animals and people.

The lifecycle of *T. gondii* is quite complex and involves two types of 'host': a definitive host (the cat, including wild cat species and domestic cats) and intermediate hosts (other animals and human).



Symptoms of Toxoplasmosis in Cats

Symptoms are related to the organ(s) affected by the tachyzoite, which may include:

Lethargy

Decreased appetite

Weight Loss

Fever

Difficulty breathing

Jaundice

Behavioral Changes

Vision loss



Weakness

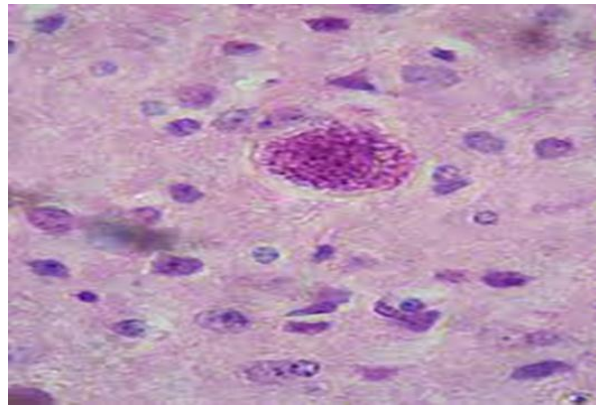
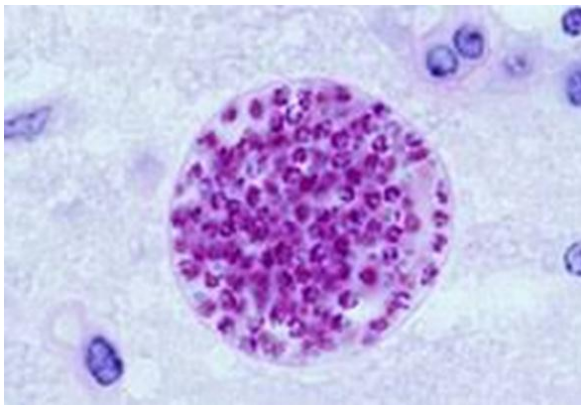
Lack of coordination/ circling

Neck pain

Seizures

Post mortem lesions

The characteristic lesions associated with systemic toxoplasmosis in cats is necrosis. Lesions may occur in almost any organ ,tissue cysts commonly found in the brain, liver, lung, lymph nodes, heart, skeletal muscle (including the tongue), and eye.



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