

# PSITTACOSIS

## [Ornithosis, Parrot Fever, Chlamydiosis]

**SPECIES:** avian species, cats, many other species

**AGENT:** Obligate, intracellular organism with a unique development cycle and worldwide distribution Genus Chlamydia has only four species, many strains 1. Chlamydia trachomatis- humans, mice (Zoonotic potential not known) 2. Chlamydia psittaci- BIRDS, Mice, g. pig, rabbits, cats, frogs, ruminants 3. Chlamydia pneumoniae- humans 4. Chlamydia pecorum- ruminants

**RESERVOIR AND INCIDENCE:** The mammalian strains appear to be a zoonotic problem only rarely. 2 cases of human conjunctivitis reported from close association with cats with chlamydial pneumonitis and conjunctivitis. **Birds are the main reservoir of human infection, however, 25% of human cases have no history of avian contact.** Ovine strains may infect pregnant women.

**TRANSMISSION:** Inhalation; dry feces produce highly infective aerosols Direct contact with feces or respiratory secretions may survive in dust for several months.

**DISEASE IN ANIMALS:** There are many strains of C. psittaci which produce a diverse disease spectrum in animals, e.g., conjunctivitis, air sacculitis, pericarditis, hepatitis, meningoencephalitis, enteritis, urethritis, arthritis, and endometritis with abortion. G.I. infection results in enteric shedding of the organism. Latency - Well recognized feature of Chlamydia infection, i.e., the organism can cause inapparent infection or fulminant infection in the same host. In clinically healthy birds, stress can precipitate clinical signs and shedding of the organism.

**DISEASE IN MAN:** Asymptomatic or clinical disease after 1-2 week incubation period. Fever, chills, myalgia, anorexia, headache, nonproductive cough. Pneumonitis or atypical pneumonia may be present. May see a toxic or septic form with hepatosplenomegaly, hepatitis, meningoencephalitis and cardiac involvement with endocarditis. Ovine chlamydial infection in pregnant women is life-threatening, causing late abortion and neonatal death and disseminated intravascular coagulation in the mother.

**DIAGNOSIS:** fecal culture (rarely successful) serology (CF, IFA) [Note: African Grey Parrot, cockatiel, and budgie may remain serologically negative despite active infection.] ELISA-based tests for antigen in feces has proven reliable.

**TREATMENT:** Tetracycline or Erythromycin.

**PREVENTION/CONTROL:** Treatment with tetracycline Introduce birds into colony from psittacosis-free flocks or use chlortetracycline chemoprophylaxis. Protective clothing (masks, gowns, gloves). Wild caught birds should be placed on chlortetracycline during quarantine. In sheep, keep flocks closed or vaccinate annually. Isolate aborting ewes until discharges cease.

**BIOSAFETY LEVEL:** BL-2 with infected flocks/birds

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