



Ornithosis 2005

No. 10, 2006

Notified cases

Ornithosis (parrot fever, psittacosis) is caused by *Chlamydophila psittaci* (*C. psittaci*), formerly known as *Chlamydia psittaci*. 2005 saw 22 notified cases of ornithosis, 18 men and four women. The patients were aged between 25 and 71. Four patients were admitted to hospital in connection with the infection.

The diagnosis was confirmed for 16 patients by detection of *C. psittaci* DNA in airway secretions and/or by serological tests. For five patients, the diagnosis was made probable via serological tests, and for one, it could not be excluded, but was not deemed particularly probable.

A possible source of infection was reported for 16 patients, all of whom owned private flocks of birds including parrots, pigeons or other birds or had come into contact with birds in other contexts.

(A. H. Christiansen, S. Cowan, Department of Epidemiology).

Diagnostic methods

Ornithosis should be considered as a diagnosis in clinical courses consistent with atypical pneumonia in conjunction with exposure to birds. **Figure 1** illustrates the interpretation of PCR and serology results. Recent diagnostic improvements include the introduction of MIF (microimmunofluorescence) to confirm specific IgM and IgG antibodies for *C. psittaci* and *C. pneumoniae*, EPI NEWS 6/99.

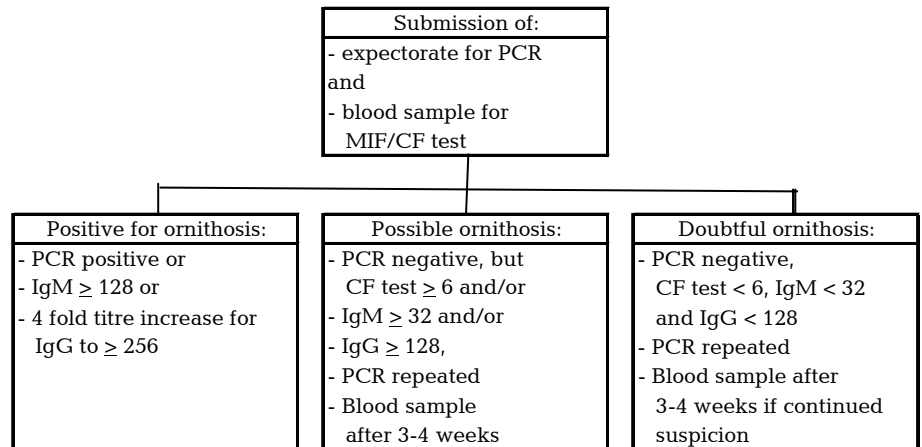
Comparison of two such tests performed at a two-week interval allows observation of the formation of antibodies and a possible increase in titres in the presence of *Chlamydophila* infection. Interpretation of the MIF analysis may be impeded by cross-reaction between *C. psittaci* and *C. pneumoniae*. In such cases clinical symptoms may serve as guidance because *C. pneumoniae* is frequently observed in conjunction with a milder clinical course.

The *Chlamydia* complement-fixation (CF) test detects antibodies for all *Chlamydophila/Chlamydia* species. *C. psittaci* infection frequently causes a considerable increase in CF levels a few weeks into to the disease course. (A. Browatzki, S. Uldum, DBMP)

NEW GUIDELINES ON AVIAN INFLUENZA

The Danish National Board of Health has issued "Guidelines on prophylactic measures in humans in the

Figure 1. Ornithosis diagnosis



event of special kinds of avian influenza, March 2006". The guidelines have been prepared in collaboration with The Danish Veterinary and Food Administration and the Working Environment Authority, among others. Outbreaks in poultry flocks are still considered a more important human infection risk than outbreaks among wild birds. However, the H5N1 influenza outbreaks in wild birds as well as in poultry, which appear to be developing into a global epizooty (panzooty) have created a need for guidance, also on the prevention of infection from wild birds. Guidelines describe influenza in birds (avian influenza) and transmission to other animals and humans. The risk of human infection is extremely limited and presupposes close contact.

The guidelines outline three risk levels and recommended security measures for each level:
Risk level 1: Sporadic contact with birds or bird droppings.

The primary protective measures are hand washing using soap after contact with birds and avoiding contact with sick or dead birds.

Risk level 2: Intensive contact with dead, presumably infected wild birds. The primary protective measure is avoidance of contamination of clothes and mucous membranes through use of adequate protective clothing, gloves and inhalation masks to avoid dust inhalation.

Risk level 3: Contact with presumably or confirmed infected poultry flocks. The protective clothing used in these cases must meet well-defined standards. As an extra precaution, prophylactic Tamiflu (oseltamivir)

treatment must be initiated. The guidelines also detail the responsibilities and communication between veterinary and health authorities. At the regional level, the Medical Officer of Health and the Regional Food Inspectorate collaborate to initiate protective measures. The guidelines are available (in Danish language) at: www.sst.dk (the Danish National Board of Health).

MEASLES OUTBREAK

Seven cases of measles have now been confirmed in Greater Copenhagen, EPI News 8/06. The patients are three children of 8 months, 20 months and 12 years of age, and four adults all aged more than 23 years. Patients have not had direct contact with each other which indicates that the infection may be extensive. The recommended time of MMR vaccination remains unchanged. Thus, children of 15 months or more are recommended for MMR vaccination which is repeated when they reach the age of 12 years. The MMR Vaccination is free of charge for persons under 18 years of age. There is, in principle, no upper age limit for MMR vaccination. The National Board of Health encourages parents and young adults to receive the MMR vaccination if they have not already been vaccinated and have not had the measles. Please find the updated recommendations at www.sst.dk. In case of measles outbreaks in e.g. a day-care institution, the Medical Officer of Health will assess the need to change the recommended time of vaccination for any persons involved. (S. Glismann, A. H. Christiansen, Department of Epidemiology).

Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, SSI (2006 figures are preliminary)

Table 1	Week 9 2006	Cum. 2006 ¹⁾	Cum. 2005 ¹⁾
AIDS	0	7	17
Anthrax	0	0	0
Botulism	0	0	0
Cholera	0	0	0
Creutzfeldt-Jakob	0	3	1
Diphtheria	0	0	0
Foodborne diseases	9	73	57
of these, infected abroad	3	19	10
Gonorrhoea	8	68	129
Haemorrhagic fever	0	0	0
Hepatitis A	0	3	26
of these, infected abroad	0	0	7
Hepatitis B (acute)	0	4	11
Hepatitis B (chronic)	12	50	24
Hepatitis C (acute)	0	1	1
Hepatitis C (chronic)	9	42	56
HIV	5	35	65
Legionella pneumonia	2	14	15
of these, infected abroad	0	2	2
Leprosy	0	0	0
Leptospirosis	0	3	5
Measles	1	4	0
Meningococcal disease	0	10	20
of these, group B	0	8	12
of these, group C	0	0	2
of these, unsp. + other	0	2	6
Mumps	2	8	2
Neuroborreliosis	0	13	14
Ornithosis	0	4	4
Pertussis (children < 2 years)	1	15	53
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	1	0
Listeria monocytogenes	0	1	0
Streptococcus pneumoniae	0	9	29
Other aethiology	0	1	0
Unknown aethiology	0	3	3
Under registration	5	25	-
Rabies	0	0	0
Rubella (congenital)	0	0	0
Rubella (during pregnancy)	0	0	0
Shigellosis	0	17	21
of these, infected abroad	0	14	20
Syphilis	2	15	14
Tetanus	0	0	2
Tuberculosis	11	71	75
Typhoid/paratyphoid fever	0	7	4
of these, infected abroad	0	7	3
Typhus exanthematicus	0	0	0
VTEC/HUS	0	19	26
of these, infected abroad	0	6	15

¹⁾ Cumulative number 2006 and in corresponding period 2005

Selected laboratory diagnosed infections

Number of specimens, isolates, and/or notifications received in SSI laboratories

Table 2	Week 9 2006	Cum. 2006 ²⁾	Cum. 2005 ²⁾
Bordetella pertussis (all ages)	3	46	155
Gonococci	14	70	83
of these, females	4	14	10
of these, males	10	56	73
Listeria monocytogenes	1	5	5
Mycoplasma pneumoniae			
Resp. specimens ³⁾	13	166	472
Serum specimens ⁴⁾	10	119	326
Streptococci ⁵⁾			
Group A streptococci	6	26	29
Group B streptococci	1	19	9
Group C streptococci	0	6	5
Group G streptococci	2	22	30
S. pneumoniae	31	268	272
Table 3	Week 7 2006	Cum. 2006 ²⁾	Cum. 2005 ²⁾
Pathogenic int. bacteria ⁶⁾			
Campylobacter	9	217	328
S. Enteritidis	4	36	36
S. Typhimurium	4	39	56
Other zoon. salmonella	8	58	50
Yersinia enterocolitica	1	20	32
Verocytotoxin- producing E. coli	0	12	14
Enteropathogenic E. coli	4	31	32
Enterotoxigenic E. coli	4	24	22

²⁾ Cumulative number 2006 and in corresponding period 2005

³⁾ Resp. specimens with positive PCR

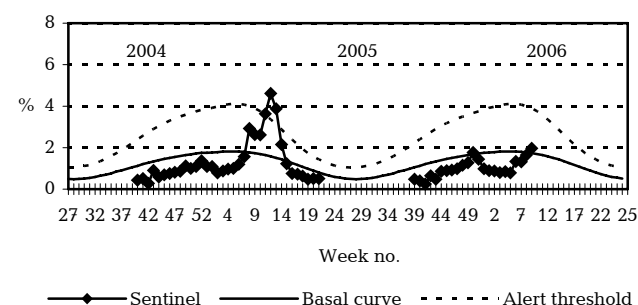
⁴⁾ Serum specimens with pos. complement fixation test

⁵⁾ Isolated in blood or spinal fluid

⁶⁾ See also www.germ.dk

Sentinel surveillance of the influenza activity

Weekly percentage of consultations, 2004/2005/2006



◆ Sentinel: Influenza consultations
 (as percentage of total consultations)
 — Basal curve: Expected frequency of consultations
 under non-epidemic conditions
 - - - Alert threshold: Possible incipient epidemic

8 March 2006