

**PSITTACOSIS 1999**

**No. 16/17, 2000**

Psittacosis (ornithosis) is caused by infection with *Chlamydia psittaci*. Modes of transmission, diagnosis, specimen taking, clinical features and treatment were outlined in EPI-NEWS 6/99. In 1999, 30 cases of psittacosis were notified, 20 men and 10 women. The age range was 15-74 years (median 46 years). Nine cases (30%) were only notified after a reminder had been sent. 19 (63%) of the notified patients had been admitted to hospital, and at least one died in connection with the disease. The diagnosis of psittacosis was confirmed in 18 cases by PCR demonstration of *C. psittaci* DNA in airway secretions. In seven cases the diagnosis was supported by serological tests. In two cases there were no relevant laboratory data, but clinical and epidemiological considerations made the diagnosis of psittacosis probable. In three cases the diagnosis of psittacosis was possible, but not very likely.

**Sources of infection**

Presumed sources of infection were stated for 23 patients (77%). Eight had been in contact with a parrot, budgerigar or parakeet, while four had been in close contact with pigeons and five with birds of unstated species. Six cases were attributable to occupational exposure. Of these, four patients were employed at the same poultry slaughterhouse, where they worked with the slaughter of ducks (see below). The other two were pet-shop employees. (A. H. Christiansen, S. Samuelsson, Department of Epidemiology)

**Outbreak at poultry slaughterhouse**

In the autumn of 1999 there was an outbreak of psittacosis at a poultry slaughterhouse in Jutland. Within two days 17 of the 64 employees at the slaughterhouse reported ill. The Medical Office of Health (MOH) was contacted by a general practitioner who reported that a slaughterhouse employee had clinical and radiological signs of psittacosis. The slaughterhouse was notified; all employees were informed of the situation and advised to seek medical advice if they should fall ill. The MOH immediately informed the local veterinary authorities and the Working Environment Service. The MOH also asked general practitioners to send

blood specimens and throat swabs to Statens Serum Institut from anyone connected with the slaughterhouse with suspected psittacosis. The blood samples were analysed by the *Chlamydia* complement-fixation test (CF) and for *C. psittaci* and *C. pneumoniae* IgG and IgM antibodies by the micro-immunofluorescence (MIF) test; the throat swabs were analysed for *C. psittaci* and *C. pneumoniae* by PCR. Statens Serum Institut received blood specimens from 22 persons and also throat swabs from 11 of these. A total of 11 patients had the diagnosis confirmed by laboratory tests and a further four were diagnosed clinically. The criteria for the laboratory diagnosis of newly acquired psittacosis are: seroconversion in CF, and/or demonstration of *C. psittaci* IgM antibodies, and/or a positive *C. psittaci* PCR test. The distribution of positive findings are shown in Table 1.

The clinical features ranged from

**Table 1. Distribution of positive laboratory findings in 11 patients with psittacosis**

No.	CF	MIF	IgM	PCR
4	+			
1	+			+
1	+		+	
3			+	
2				+
Pos./total	6/11	4/11	3/7	

mild influenza-like symptoms to pneumonia requiring hospital admission. One patient was admitted with signs of acute abdomen and operated for suspected appendicitis. After operation he developed high fever and diarrhoea; the throat swab was positive for *C. psittaci* by PCR. All 15 patients with psittacosis had direct contact with the slaughterhouse. The specific source of infection was not found, and after visiting the slaughterhouse, the Work Inspectorate found no occasion for admonition.

**Comments**

Psittacosis is a rare disease in Denmark, where 20-30 cases are notified per annum, EPI-NEWS 6/99. In the described outbreak, most of the 15 cases were only found because occupational exposure was suspected. The majority of patients had a mild,

influenza-like course of illness or symptoms of atypical pneumonia. *C. psittaci* can give rise to gastrointestinal symptoms, which supports the view that *C. psittaci* caused the symptoms that led to appendectomy in one patient.

(M. Bennedsen, Neisseria Unit, A. Filskov, MOH, Aarhus County)

**MENINGOCOCCAL DISEASE IN PILGRIMS TO MECCA**

The WHO has reported a substantial number of cases of meningococcal disease among pilgrims to Mecca or their close contacts. So far 40 cases have been reported from the UK (22), France (14), Holland (3) and Germany (1). Most cases were due to meningococci of serogroup W135. Eight patients have died. No Danish cases have been reported. Saudi Arabia requires pilgrims to be vaccinated against serogroup A+C meningococci, EPI-NEWS 7/00. The relevant vaccine, which is also used in Denmark, does not protect against serogroup W135. A tetravalent vaccine which protects against serogroup W135 is in fact available, but this has not yet been registered for use in Denmark.

(P. Andersen, Dept. of Epidemiol.)

**MEASLES**

Outbreaks of measles are currently being reported from Holland, Sweden and Ireland. In Holland, EPI-NEWS 3/00, the health authorities have received 3263 notifications from June 1999 to March 2000, inclusive. A total of 74 (2%) were admitted to hospital and a further 473 (15%) had complications. Three patients died (aged 2, 3 and 17 years) and five developed encephalitis. 95% of the patients were unvaccinated. In Sweden, 69 patients were notified from December 1999 to February 2000, inclusive, of whom about 1/3 were admitted to hospital. Three had had a single vaccination; the rest were unvaccinated. In Ireland, 496 measles cases have been notified this year, up to 17 April. 60 (12%) were admitted to hospital and six of these to intensive care. One patient died. (T. Rønne, Dept. of Epidemiology)

# Patients with laboratory-confirmed *Listeria monocytogenes* infection

1st quarter of 2000 compared with 1999



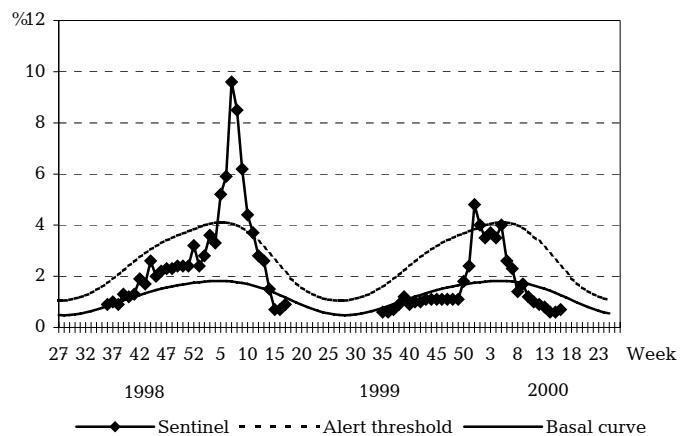
	1st quarter 2000	1st quarter 1999	Whole year 1999
Mother/child infection	3 *	0	2
Septicaemia	3	5	29
Meningitis	5	0	7
Other	0	1	5
<b>Total</b>	<b>11</b>	<b>6</b>	<b>43</b>

\* One of these led to abortion in week 18

(Dept. of Gastrointestinal Infections)

## Sentinel surveillance of influenza activity

Weekly percentage of consultations, 1998/1999/2000



- Sentinel:** Influenza consultations as % of total consultations
- Basal curve:** Expected frequency of influenza consultations under non-epidemic conditions
- Alert threshold:** Possible incipient epidemic

(Dept. of Epidemiology)

