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EPIDEMIC KERATOCONJUNCTIVITIS - ADENOVIRUS INFECTION

In recent months the Department of Virology has received an increasing number of eye swabs for adenovirus examination. There has been a high proportion of positive specimens, comprising a total of 22 patients. Colated with information from eye departments and public health bodies in several counties, this suggests that the cases are due to epidemic keratoconjunctivitis. In 1987 a similar outbreak of epidemic keratoconjunctivitis in Storstrøm County spread to large areas of the country. The infection is caused by adenovirus, usually types 8, 37 or 19. The type of adenovirus currently involved is under investigation. A possible epidemiological relationship between the cases is also being reviewed. The incubation period is 8-10 days. Clinical features are redness and swelling of the conjunctiva with corneal pain and opacities, sometimes accompanied by preauricular lymphadenopathy and general symptoms. Symptoms may last for several weeks, and the corneal precipitates may persist for months. There is no specific antiviral treatment. Diagnosis is by the demonstration of adenovirus by PCR, with results within a few days, or by culture, with results after 2-3 weeks. Serological diagnosis from a rise in antibody titre is also possible, whereas antigen detection is of poor diagnostic sensitivity for eye swabs. Transmission is by contact, often affecting members of the family. At eye examination the infection may spread from patient to patient or to staff, typically via contaminated hands or instruments. It is therefore very important to maintain correct hand hygiene. The virus can survive in the dry state on surfaces for a long period. Heat or alternatively chlorine-based disinfectants or glutaraldehyde are preferred for disinfection, as alcohol is ineffective against adenovirus. Patients with suspected epidemic keratoconjunctivitis should be examined in the same room, preferably at the end of the day. An ensuing thorough cleaning and disinfection is essential to prevent the spread of infection. (E.T. Jensen, B. Böttiger, Dept. of Virology, M. Christensen, Central Dept. of Hospital Hygiene)

Table 1. No. of cases of bacteraemia due to group G haemolytic streptococci in the counties of Frederiksborg and Copenhagen, 1990-1999*

	1990-1996	1997	1998	1999*
Frederiksborg County, no. of cases	25	5	7	10
- Annual incidence per 100,000, average	1		2,3**	
Copenhagen County, no. of cases	72	10	18	17
- Annual incidence per 100,000, average	1,7		2,8**	

* Up to 1 September 1999

** Average for 1997-1999

BACTERAEMIA DUE TO GROUP G HAEMOLYTIC STREPTOCOCCI

Within a short period during the summer of 1999 three patients from Frederiksborg County were found to have group G haemolytic streptococci in the blood. This led the microbiology departments of Hillerød and Herlev Hospitals to review the incidence of group G streptococcal bacteraemia in the counties of Frederiksborg and Copenhagen. For 1997 to 1 September 1999 there was an increased incidence of group G streptococcal bacteraemia in both counties, as compared with the period 1990-1996 (Table 1). Group G haemolytic streptococci form part of the normal flora of the throat, skin, vagina and gastrointestinal tract in man and animals. Infections show a clinical picture similar to that for group A and C streptococcal infections, but are less frequent and often less serious. There is no immediate explanation for the observed rise in the incidence of group G streptococcal bacteraemia in Frederiksborg and Copenhagen Counties. The sex distribution for the patients from Frederiksborg County in the period 1997 to 1 September 1999 was 6 women and 16 men, with a mean age of 68 years. Five of the 22 patients died from causes related to the bacteraemia. The bacteria were fully sensitive to penicillin and other antibiotics. A review of the patients' clinical records is planned to further characterize these cases. (S. Wichmand, A. Jensen, Microbiol. Dept., Hillerød Hospital, J.O. Jarløv, Microbiol. Dept., Herlev Hospital)

COMMENTS

The Streptococcus Unit at Statens Serum Institut receives isolates from patients with bacteraemia and meningitis from the whole country. There has been a slight rise in the number of haemolytic group G strains received. Thus 79 isolates were received in 1998 as against 50 in 1990. It is not known what this rise is due to. At the moment all cases of inva-

sive group A, B, C and G streptococcal infections are being followed up by sending treating physicians a questionnaire on the clinical and epidemiological circumstances of the case.

(H. Bossen Konradsen, ALMOS: Dept. of Respiratory Infections, Meningitis and Sexually Transmitted Infections, formerly the Neisseria Department)

PARATYPHOID FEVER - TURKEY

As previously reported in EPI-NEWS, there has been an outbreak of S. paratyphi B in travellers returning from Turkey, especially from the town of Alanya. By 16 September 1999 there had been a total of 273 cases, 49 from Denmark, 78 from Sweden, 59 from Norway, 30 from Finland, 30 from Germany, 16 from England and Wales, 10 from Holland and one from Switzerland. Symptoms started in the period 13 July to 4 September.

New cases are now declining, but it cannot yet be determined if the outbreak has ceased. The source of infection is unknown. A case-control study of about 100 cases from six countries, including Denmark, is in progress to investigate the outbreak and identify a possible source. Physicians should still be on the look-out for paratyphoid fever in travellers returning from Turkey. (K. Mølbak, Dept. of Gastrointestinal Infections, S. Samuelsson, Dept. of Epidemiology)

J. ENCEPHALITIS - NEPAL

From Nepal is reported an increased incidence of Japanese encephalitis and malaria, perhaps especially from the border area between India and Nepal. Vaccination against Japanese encephalitis is therefore now also recommended for short-term travellers during the present season, EPI-NEWS 17-18b/99.

(Department of Epidemiology)

22 September 1999

Patients with laboratory confirmed pertussis

2nd quarter 1999 compared with 2nd quarter 1998

	April	May	June	Total	
				2nd quarter 1999	2nd quarter 1998
< 2 years	8	11	17	36 (14)	21
2-17 years	18	33	74	125 (61)	45
≥ 18 years	3	9	15	27 (12)	12
Total	29	53	106	188 (87)	78

From 01.01.99 the report includes all cases of pertussis confirmed by culture or PCR

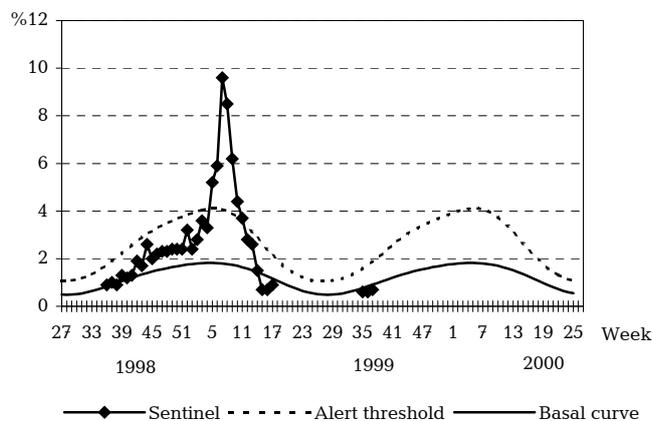
Up to 1998 the report included laboratory confirmed pertussis only

() Cases of pertussis confirmed by culture, 2nd quarter 1999

(ALMOS)

Influenza activity in sentinel surveillance

Weekly percentage of consultations, 1998/1999/2000



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

(Dept. of Epidemiology)