EPI-NEWS **NATIONAL SURVEILLANCE OF COMMUNICABLE DISEASES**

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PERIANAL GROUP A STREPTOCOCCAL INFECTION IN KINDERGARTEN

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In February the Viborg County Medical Office of Health (MOH) was notified of a large number of children at a kindergarten who had symptoms of perianal infection and anal bleeding. A general practitioner had seen several of these children and group A haemolytic streptococci (GAS) were cultured from the anus. Of 34 children at the kindergarten, 16 had shown signs of the infection. New cases continued to occur, including instances among the adult staff. It was not immediately possible to identify the source of infection. An inspection of the institution concerned showed good hygienic standards, and the institution had also ensured that the affected children were referred to a physician. The MOH then informed all the general practices covering the children at the institution. They were requested to ensure that both throat and anal swabs were taken from children presenting with these symptoms. It was also suggested that children with symptoms and/or positive cultures be treated with oral phenoxymethyl penicillin at standard dosage. However, as this treatment proved to have only a transient effect, it was changed, in consultation with the Clinical Microbiology Department of Viborg Hospital, to clarithromycin, because its better penetration, fewer side effects and more suitable formulation for children (suspension).

Symptoms
Symptoms and signs in the children with perianal GAS infection were as follows:
1) Most children complained of pain on defaecation.
2) Appearances of the perianal region ranged from a slight reddening and irritation to cellulitis-like changes with a high degree of infiltration and inflammation. The inflammation was characteristically localized as a 2-3 cm diameter perianal circular region with a sharp transition to normal skin. Only a few children developed perianal fissures.
3) Most children had had blood in the motions.
In the course of the screening initiated at the institution, many children were also found to be asymptomatic carriers of perianal GAS.

Microbiology
A total of 161 swabs were taken from children at the institution and from children and adults in contact with them. GAS were cultured from 37 persons, with the following distribution of positive swab sites:

Anal/rectal swabs:	19
Throat swabs:	13
Throat and anal/rectal swabs:	2
Unstated:	3

The GAS isolated were of the T-28 subgroup, which can cause both throat infections and invasive disease. Only a few cases like the above have been described previously, mostly as case reports. A Finnish investigation from 1997 described a small outbreak at a child day-care institution. The study showed that all the cases were due to GAS of the same serotype, but the source of infection was not identified.

Conclusion
Physicians should be aware of the possibility of perianal GAS infection, and throat and anal swabs should be taken from cases presenting with the symptoms described. There is also a risk of relapse after treatment with penicillin. The clarithromycin suspension proved to be effective.
(J. Misfeldt, MOH, Viborg County, J.P. Petersen, Nørager General Practice, H. Schumacher, CMD, Viborg)

COELIAC DISEASE
Coeliac disease is under-diagnosed in both children and adults. The disease is today regarded as an autoimmune disease provoked by a food constituent. In patients with coeliac disease, small bowel biopsy shows villous atrophy and autoantibodies against intestinal tissue transglutaminase may be demonstrated. According to a recently published article in Ugeskrift for Læger, the diagnosis of coeliac disease should be considered in children with such widely different symptoms as prolonged diarrhoea (both with and without a microbiological diagnosis), failure to thrive, with subnormal weight or growth, nausea, recurrent abdominal pains, constipation, malabsorptive states, anaemia, IgA deficiency, recurrent aphthous ulcers and dermatitis herpetiformis. Coeliac disease should also be considered in cases of insulin-dependent diabetes, Down's syndrome, Turner's syndrome, osteomalacia and in several autoimmune diseases affecting the thyroid gland, joints and connective tissues. The occurrence of coeliac disease or dermatitis herpetiformis in close relatives increases the risk of coeliac disease in children. Coeliac disease in adults frequently takes an atypical course, often with uncharacteristic rheumatological or abdominal symptoms. This is probably an important contributory cause of under-diagnosis of the disease. When coeliac disease is suspected, it is convenient to initiate investigations with a blood test for antibodies against gliadin, endomysium and tissue transglutaminase ("coeliac screen"). It is also advisable to check for IgA deficiency before taking blood for these tests, as IgA deficiency occurs in 10% of coeliac patients. In patients with IgA deficiency, the presence of IgG gliadin antibodies is clinically significant, whereas IgG antibodies in patients with normal serum IgA is of very uncertain clinical significance, especially in adults. Any IgA deficiency should be stated on the coeliac screen request form. The coeliac screen is currently being validated to establish the clinical significance of the different antibodies mentioned. Testing for reticulin antibodies has now been replaced by transglutaminase antibodies, as this test is of far greater diagnostic specificity and sensitivity. The test is by ELISA and thus gives a quantitative determination of anti-transglutaminase, while the anti-endomysium antibodies are detected by indirect immunofluorescence. It is still uncertain whether the test for antibodies against transglutaminase can be optimized so as to replace the test for antibodies against endomysium. Intestinal biopsy showing flattened villi currently remains the only certain criterion for the diagnosis of coeliac disease.
(B. Weile, A. Wiik, Dept. of Autoimmune Diseases)

ERRATUM
The requirement for yellow-fever vaccination is for vaccination within the last 10 years, and not within the last 10 days, as erroneously stated in EPI-NEWS 13/00.
(Department of Epidemiology)

Patients with selected individually notifiable diseases

Notifications received January-March 2000, by county, compared with the same period of 1999

County	AIDS		Hepatitis A		Meningococcal disease		Tuberculosis	
	2000	1999	2000	1999	2000	1999	2000	1999
Cph. Municipality	6	7	6	3	4	4	39	42
Frb. Municipality	2	1	-	-	-	3	8	2
Copenhagen	2	6	2	2	3	6	22	19
Frederiksborg	-	-	3	-	3	5	5	3
Roskilde	-	-	-	5	1	1	6	3
West Zealand	1	-	1	-	3	2	3	2
Storstrøms	-	-	1	-	3	4	5	3
Bornholms	1	-	-	-	-	1	-	-
Funen	1	2	2	-	8	4	9	7
South Jutland	-	2	1	1	7	1	5	2
Ribe	-	1	3	-	2	1	1	5
Vejle	-	1	-	-	2	2	10	3
Ringkøbing	-	-	-	-	5	6	1	4
Aarhus	4	2	2	-	4	4	7	18
Viborg	-	1	-	-	2	2	4	3
North Jutland	-	-	2	1	8	2	8	13
Other	-	3	-	1	-	-	1	2
Denmark	17	26	23	13	55	48	134	131

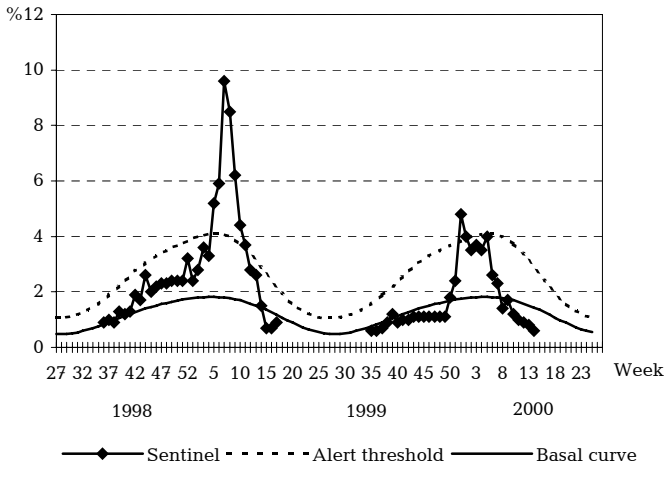
Patients with other individually notifiable diseases

Notifications received January-March 2000 and 1999, whole country

	January-March	
	2000	1999
Bacterial meningitis	40	51
Hepatitis B	11	17
Hepatitis C	2	3
Hepatitis B+C	2	-
Legionellosis	11	16
Measles	-	2
Mumps	2	10
Paratyphoid fever	1	2
Psittacosis	6	7
Shigellosis	19	7
Typhoid fever	4	3
Whooping cough		
< 2 years	45	18

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)