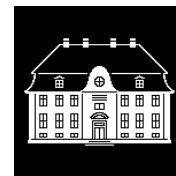


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USE OF VARICELLA-ZOSTER IMMUNOGLOBULIN

No. 4, 2000

The Department of Epidemiology has had several inquiries about the use of varicella-zoster immunoglobulin (VZIG) in seronegative pregnant women who have been exposed to chickenpox. British, US and other recommendations have therefore been reviewed and the indications for VZIG reassessed below. About 98% of women born and brought up in Denmark have had chickenpox. Only about 50% of women born and brought up in tropical countries have antibodies to VZ virus. The infection may take a more serious course in adults than in children, as adults run a greater risk of complications such as viral pneumonia. Pregnant women may have a severer course than other adults. Chickenpox during pregnancy is not usually an indication for abortion. If a pregnant woman is infected during the 9th-20th week of pregnancy, there is about a 2% risk of the child developing malformations, the so-called congenital VZ syndrome.

Chickenpox in pregnancy

Examples of possible situations are given below:

- 1) A pregnant woman not known to have had chickenpox is massively exposed, e.g. when a family member develops chickenpox. She should have a blood test to determine her serological status. If seronegative, she should be given VZIG and offered vaccination after delivery. At least 5 months should elapse between giving VZIG and vaccination.
- 2) If a pregnant woman develops clinical varicella infection she should be treated with acyclovir and closely followed up or admitted to hospital if necessary. Data from women who for various reasons have been treated with acyclovir at different times during pregnancy have not revealed an increased incidence of fetal abnormalities. Once over the infection the woman should be referred to the obstetrician for follow-up.
- 3) In chickenpox outbreaks in e.g. asylum centres, all women of child-bearing age should be serologically tested. Seronegative women should be offered vaccination (postponed until after delivery for pregnant women).
- 4) A woman with a newborn child and no history of chickenpox, who is to be discharged home, where an

older child has chickenpox, should be tested for antibodies. If she is seronegative, treatment of the newborn child with VZIG should be individually assessed in the light of the exposure risk.

Indications for VZIG

Stocks of VZIG at Statens Serum Institut are limited, but there are four clear indications for the use of VZIG:

- 1) Newborn children whose mothers develop chickenpox during the last five days of pregnancy or up to two days after delivery.
 - 2) Varicella-exposed premature babies of birthweight 1 kg or less, or babies born before the 28th week of pregnancy are given VZIG irrespective of the mother's antibody status.
 - 3) Varicella-exposed seronegative children under certain types of immunosuppressive treatment for malignant disorders.
 - 4) Massively varicella-exposed seronegative pregnant women.
- Newborn children without maternal antibodies who are massively exposed to varicella during the first four weeks of life should be considered for treatment with VZIG. VZIG should be given within 3-4 days of exposure. If VZIG has not been given in time, the exposed person should be closely followed up for possible development of chickenpox. The Department of Epidemiology should be contacted when there is a possible indication for VZIG treatment.

(E. Smith, Dept. of Epidemiology, B. Faber Vestergård, Dept. of Virol., M. Stellfeld, Dept. of Medicine)

SOURCE OF HOUSEHOLD SALMONELLA OUTBREAK TRACED

Investigation of the Salmonella outbreak in Vejle County (EPI-NEWS 1/00) has now been completed. Tissue, blood and faecal specimens were taken from the two deceased family members and showed the presence of Salmonella enteritidis FT6. S. enteritidis FT6 was also demonstrated in a stool specimen from another member of the family with symptoms of gastroenteritis. All three patients had eaten a cake containing a cream made of cocoa, vegetable fat and raw eggs. The cake was made on 23 December and eaten on the evening of 27 December. Analysis of remains of the cake demonstrated S. enteritidis

with a colony count of 10^{5-10^7} organisms/g, an extraordinarily high figure. The eggs derived from a non-professionally kept stock, and examination of the flock showed S. enteritidis FT6 in intestinal and other tissue samples from killed hens. No Salmonella was found in other food samples from the affected household. DNA fingerprinting (PFGE analysis) showed that the S. enteritidis FT6 isolated from the deceased patients was identical with both the isolate from the cake and the isolates from the hens, as well as being identical with the clone of S. enteritidis FT6 that is widespread in Danish laying hens. Stool specimens collected from another family that had eaten cake containing eggs from the same hen stock showed S. enteritidis FT6 in two of six persons. As the cake was eaten on 27 December and the colony count was not performed until 4 January, the high count does not necessarily reflect the infective dose at the time of ingestion. However, even with this proviso it seems probable that the two deceased patients, who ate most of the cake, were massively exposed. This consideration also takes into account the fact that the fatty cream protects the bacteria from being killed by gastric acid. Moreover, no predisposing factors have been identified in the fatal cases. The cause of death was thus in all probability septic shock due to a food-borne Salmonella infection from raw eggs. Fatal Salmonella infections in previously healthy persons are rare, but have been reported before now.

(K. Mølbak, Dept. of G-I Infections, A. Poulstrup, MOH, Vejle County)

YELLOW FEVER IN BRAZIL

According to the WHO, 61 suspected cases of yellow fever have been reported in Brazil since the beginning of the year. Five of the cases have at present been laboratory-confirmed, two of these with a fatal outcome. Infection is thought to have occurred in Goiás, but several have had the disease diagnosed in São Paulo and Rio de Janeiro, which lie outside the traditional yellow fever area. On this basis, all travellers to Brazil should be vaccinated against yellow fever.

(T. Rønne, Dept. of Epidemiology)

26 January 2000



Patients with laboratory-confirmed *Listeria monocytogenes* infection

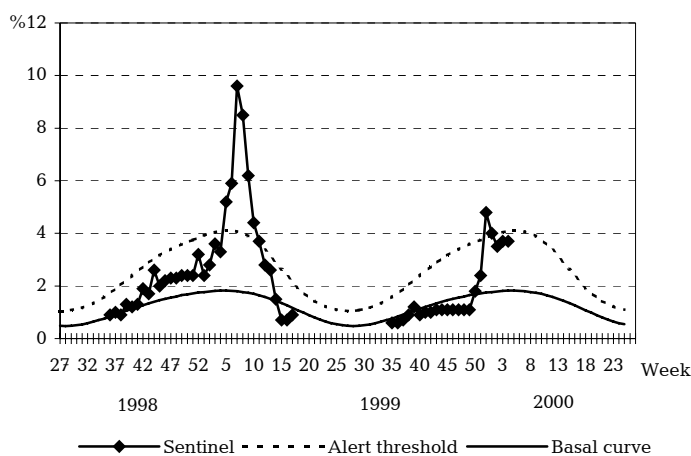
4th quarter of 1999 compared with 1998 (whole year)

	4th quarter 1999	Cumulative data 1999	Whole year 1998
Mother/child infection	1	2	3
Septicaemia	10	29	27
Meningitis	3	7	8
Other		5	2
Total	14	43	40

(Dept. of G-I 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

Up to week 3 inclusive, a total of 112 patient specimens have been received via the sentinel system. Twentyfour influenza A-isolates have been found, of these, 22 were subtyped as influenza A/Moscow/10/99-A/Sydney/5/97/(H3N2)-like.

(Dept. of Epidemiology)