NEW CORONA VIRUS AND KAWASAKI SYNDROME

Corona virus is a group of RNA viruses that are well known from the animal kingdom and are found in poultry, dogs, cats, cattle, etc.
Until 2004, three different corona viruses were isolated and characterised from humans. Two of these viruses, 229E and OC43, have long been known to be capable of causing both upper and lower respiratory tract infections. Both viruses have caused epidemics and nosocomial infections. The two viruses are responsible for 8-30% of all incidences of coryza and common cold. SARS corona virus is the third corona virus isolated from humans.

New corona virus

In 2004, a new corona virus (NL63) was identified in the Netherlands. This virus has been found in both children and adults with upper and lower respiratory tract infections. Viruses have subsequently also been found in Canada, Australia and Japan.
In January 2005, an NL63-variant was described that was isolated from a child with Kawasaki syndrome. A study of 11 children with Kawasaki syndrome, from whom airway secretions were available, was subsequently conducted. In seven of these children, corona virus NL63 could be detected, while it was detected in only one of a group of 22 controls. Further studies are awaited to elucidate the possible association between Kawasaki syndrome and corona virus NL63.

Kawasaki syndrome

Kawasaki syndrome is a rare disease with a tendency to appear in minor epidemics. The disease occurs particularly in children, where 80% of the cases occur before the age of five. Characteristic symptoms are fever, red eyes and redness of the lips and mucous membranes of the mouth and throat. In addition, generalised uncharacteristic rash and cervical lymphadenopathy are seen, with swelling of hands and feet, followed by peeling of the skin. The disease involves generalised vasculitis, including the coronary arteries in about 20%. Coronary artery aneurysms develop in 15-20% of untreated patients, and death because of coronary occlusion is seen in 1-2% of untreated patients later in the course of the disease. Treatment, which is a specialist task, should be commenced as quickly as possible after the diagnosis has been made.

Corona virus NL63 in Denmark

Corona virus NL63 has been detected in both Danish children and adults, with symptoms in the form of fever, coryza, influenza-like symptoms and pains in the chest or joints. None of the patients had any signs of Kawasaki syndrome. SSI has established PCR investigations for corona virus OC43, 229E, SARS corona virus and NL63. Investigations of airway secretions are conducted on weekdays, and results are available the same day, if the sample is received in the laboratory by 9 am.
(L. P. Nielsen, Dept. of Virology)

VACCINATION OF SEWAGE WORKERS

The Danish Working Environment Authority has revised guideline D.2.14 concerning vaccination of persons who work with sewer sludge and sewage effluent; see www.at.dk. These persons should be effectively vaccinated against hepatitis A, tetanus and polio.
Any person who has not been vaccinated or are incompletely vaccinated should be given the missing vaccinations by his or her own GP.
Hepatitis A: Onset of protection is 8-14 days after first vaccination. As the incubation time is at least 14 days, the vaccinated person is in practice immediately protected. Protection subsequently lasts at least one year. The second hepatitis A vaccination is given after 6-12 months, but may be given up to six years after the first. Protection subsequently lasts at least 20 years.
Tetanus: Primary vaccination consists of three vaccinations. Revaccination is recommended after five years and again every 10 years, EPI-NEWS 7/2004.
Before commencing work, the patient should have received at least two vaccinations at an interval of at least four weeks. Work can commence two weeks later.
Polio: Protection against polio is considered life-long after either three doses of inactivated polio vaccine (IPV) followed by three doses of oral polio vaccine (OPV), or four doses of IPV. IPV has usually been given in the childhood vaccination programme as diphtheria-tetanus-polio or diphtheria-tetanus-pertussis-polio vaccine.
Before commencing work, the patient should have received at least two vaccinations at an interval of at least four weeks. Persons who have been vaccinated against polio, but for whom the number of doses cannot be documented, should receive one dose of IPV before commencing work.
(Department of Epidemiology)

FREE HEPATITIS VACCINATION FOR IV DRUG USERS AND THEIR FAMILIES

According to a new regulation from the Ministry of the Interior and Health, free vaccination against hepatitis B for IV drug users will be introduced as per 1 April 2005. A combined hepatitis A/B vaccine is used for the vaccination, so that protection against hepatitis A is provided at the same time.
In addition, free vaccination against hepatitis B infection is being introduced for members of households of IV drug users with chronic hepatitis B, as well as any steady sexual partners outside the household. Only hepatitis B vaccine is given to these. The scheme is a follow-up to the government's action plan against drug abuse from October 2003.
The National Board of Health recommends that IV drug users be vaccinated as early as possible in the course of their period of abuse. Serological testing is recommended before vaccination in order to determine whether the drug user already has or has had a hepatitis B infection. Investigation and vaccination of relatives is subsequently arranged. The National Board of Health's guidelines of June 2002 on prophylaxis against viral hepatitis can be seen on www.sst.dk.
(National Board of Health)

OUTBREAK OF MARBURG HAEMORRHAGIC FEVER IN ANGOLA

WHO has confirmed an outbreak of Marburg haemorrhagic fever in the province of Uige in northern Angola. Up to 29 March, there have been reports of a total of 124 patients, of whom 117 have died. About 3/4 of the diseased have been children under the age of five years. WHO is cooperating with the local authorities to identify diseased persons and contacts to these, and to secure basic prophylaxis against infection. Precautions on travel to Angola have not been introduced; however, contact with sick persons in the affected area should be avoided.
(Department of Epidemiology)

Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, SSI (2005 figures are preliminary)

Table 1	Week 12 2005	Cum. 2005 [1]	Cum. 2004 [1]
AIDS	0	19	77
Anthrax	0	0	0
Botulism	0	0	0
Cholera	0	0	0
Creutzfeldt-Jakob	0	2	2
Diphtheria	0	0	0
Food-borne diseases	4	73	78
of these, infected abroad	0	14	13
Gonorrhoea	2	141	73
Haemorrhagic fever	0	0	0
Hepatitis A	0	27	26
of these, infected abroad	0	7	6
Hepatitis B (acute)	0	13	5
Hepatitis B (chronic)	3	38	41
Hepatitis C (acute)	0	1	1
Hepatitis C (chronic)	6	70	106
HIV	3	85	73
Legionella pneumonia	0	16	0
of these, infected abroad	0	2	2
Leprosy	0	0	0
Leptospirosis	0	5	1
Measles	0	0	0
Meningococcal disease	1	17	31
of these, group B	1	12	21
of these, group C	0	1	3
of these, unspec. + other	0	4	7
Mumps	0	3	0
Neuroborreliosis	0	15	50
Ornithosis	0	4	2
Pertussis (children < 2 years)	2	59	50
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	0	0
Listeria monocytogenes	0	0	1
Streptococcus pneumoniae	1	27	31
Other aethiology	0	0	2
Unknown aethiology	0	1	4
Under registration	6	27	-
Rabies	0	0	0
Rubella (congenital)	0	0	0
Rubella (during pregnancy)	0	0	0
Shigellosis	1	27	22
of these, infected abroad	1	22	18
Syphilis	7	24	41
Tetanus	0	2	0
Tuberculosis	10	99	90
Typhoid/paratyphoid fever	0	7	6
of these, infected abroad	0	3	4
Typhus	0	0	0
VTEC/HUS	1	30	33
of these, infected abroad	1	15	4

[1] *Cumulative number 2005 and in corresponding period 2004*

Selected laboratory diagnosed infections

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

Table 2	Week 12 2005	Cum. 2005 [2]	Cum. 2004 [2]
Bordetella pertussis			
(all ages)	7	190	182
Gonococci	1	106	70
of these, females	0	17	12
of these, males	1	89	58
Listeria monocytogenes	1	8	7
Mycoplasma pneumoniae			
Resp. specimens [3]	7	516	44
Serum specimens [4]	15	370	130
Streptococci [5]			
Group A streptococci	0	38	36
Group B streptococci	0	11	17
Group C streptococci	0	5	6
Group G streptococci	0	33	22
S. pneumoniae	24	358	429
Table 3	**Week 10 2005**	**Cum. 2005 [2]**	**Cum. 2004 [2]**
Pathogenic int. bacteria [6]			
Campylobacter	22	413	422
S. Enteritidis	7	62	58
S. Typhimurium	7	69	56
Other zoon. salmonella	11	93	85
Yersinia enterocolitica	4	41	33

[2] *Cumulative number 2005 and in corresponding period 2004*

[3] *Resp. specimens with positive PCR*

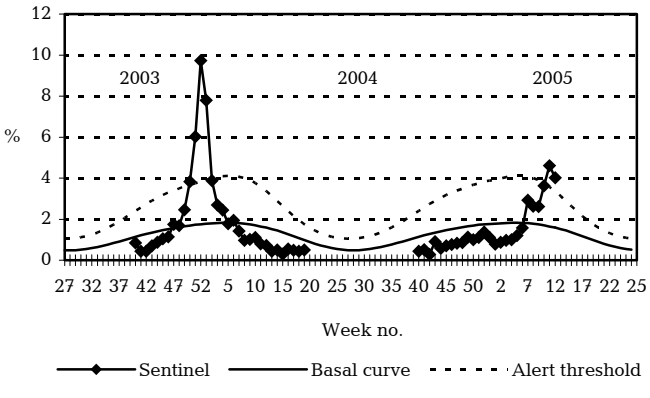
[4] *Serum specimens with pos. complement fixation test, MPT*

[5] *Isolated in blood or spinal fluid*

[6] *See also www.germ.dk*

Sentinel surveillance of the influenza activity

Weekly percentage of consultations, 2003/2004/2005



Sentinel: Influenza consultations (as percentage of total consultations)

Basal curve: Expected frequency of consultations under non-epidemic conditions

Alert threshold: Possible incipient epidemic

30 March 2005