



CRYPTOSPORIDIUM OUTBREAK

At the end of August, a series of workers at a large Copenhagen company developed gastroenteritis with diarrhoea as the primary symptom. Faeces samples from 13 out of 17 persons were positive for *Cryptosporidium hominis*.

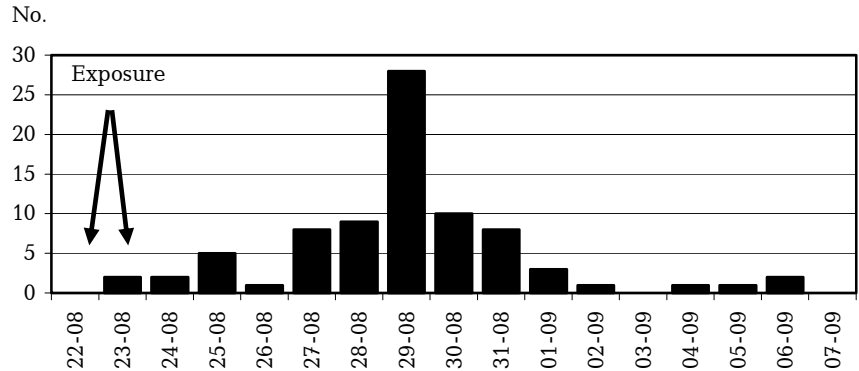
A case-control study was launched among selected members of staff, followed up by a cohort study. The results showed that disease was associated with having eaten in the company's canteen on Monday 22 and Tuesday 23 August, [figure 1](#). Furthermore, an increased risk associated with having eaten from the canteen's salad buffet was observed. Specifically among persons who had eaten salad, there was an increased risk associated with ingestion of whole peeled or grated carrots. The whole carrots were served in a large dish of water, which was re-filled several times without changing the water, and there were no tongs for the customer to use. A possible scenario is that one of the buffet customers, who was secreting the parasite, had contaminated the water and carrots with his or her hands. The number of presumed cases was calculated as 99.

Comments

Carrots were established to be a likely source of the outbreak, although this was not exactly proven. *Cryptosporidium* is often transmitted via faecally contaminated drinking water or bath water. Infections with *Cryptosporidium* are presumed to be relatively rare in Denmark, but the current knowledge about it is limited. At SSI last year, 30 cases were recorded. The infection is not included in the laboratory notification system. Probably only a small fraction of specimens are investigated for parasites from persons with diarrhoea all over the country. In the current case, the specimens were only tested because of the ongoing outbreak, and only after they were found negative for diarrhoeagenic bacteria and virus. The only previously described outbreak in Denmark occurred in 1989 among inpatients at Hvidovre Hospital, probably due to a patient having contaminated ice cubes in an ice cube machine.

The current outbreak shows that it is important to maintain good hygiene at buffets, including the provision at all times of implements with which to serve each foodstuff, and that water

Fig. 1. Epidemic curve for *Cryptosporidium hominis* outbreak, with date of onset of symptoms for presumed and confirmed cases, Aug-Sep 2005



for vegetables should be changed frequently.

(S. Ethelberg, L. S. Vestergaard, R. Stensvold, H.V. Nielsen, DBMP, K. Mølbak, Department of Epidemiology, M. Lisby, Regional Food Control Centre, North-East Zealand)

AVIAN FLU IN EUROPE

Avian flu H5N1, which is circulating in Asia, has now been detected to a limited degree in birds in Turkey and Romania. There have been no reports of transmission from animals to humans in Turkey or Romania. No travel restrictions have been introduced, but there is a ban on the import of live birds and all poultry products from Turkey and Romania. Under normal circumstances, bird flu bears no risk of infection for humans. However, people travelling to areas with bird flu are advised to avoid contact with live poultry, e.g. at markets, where live birds are sold. There is no risk on eating well-cooked poultry or eggs. To minimise the risk of infection, good hand hygiene is important.

(S. Glismann, Department of Epidemiology)

TRYPANOSOMIASIS IN CENTRAL AND EAST AFRICA

Over the last six months, several outbreaks of trypanosomiasis (sleeping sickness) have been reported in a number of central and east African countries, including northern Angola, the Democratic Republic of Congo, southern Sudan, Uganda, the Central African Republic, and Nigeria. WHO has previously estimated that sleeping sickness in selected areas of these countries is among the most common causes of death, even more common than AIDS.

In Uganda, there has recently been spread of the most aggressive form of

sleeping sickness, *Trypanosomiasis brucei rhodesiense*, from districts of endemic disease to neighbouring districts. This has occurred despite attempts of controlling the disease through provision of effective medicine for treatment of human cases, by transmission-inhibiting measures in the form of vector control (combating the tsetse fly), and by mass treatment of infected domestic animals, in particular cattle. However, new studies show that the effect of these initiatives has been limited.

The risk of contracting trypanosomiasis on ordinary tourist travel in the affected areas is considered limited. However, infection of a tourist has recently again been reported after a visit in the Serengeti National Park in northern Tanzania.

In the event of infection after being bitten by a tsetse fly, the acute symptoms are fever, headache, muscle pains, vomiting, lymphadenopathy and rash.

(L. S. Vestergaard, Department of Bacteriology, Mycology and Parasitology)

COUNSELLING OF PRIVATE INDIVIDUALS

SSI is again experiencing an increasing number of enquiries from private individuals stating that their general practitioners have referred them for advice about travel vaccination and the like. SSI does not usually advise private individuals. The counselling should take place via the person's own GP or other healthcare staff who, in case of doubt or for more detailed questions, may contact the Institute. Further, on the SSI website www.ssi.dk, answers to many questions may be found. (Department of Epidemiology)

Individually notifiable diseases

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

Table 1	Week 41 2005	Cum. 2005 ¹⁾	Cum. 2004 ¹⁾
AIDS	0	48	36
Anthrax	0	0	0
Botulism	0	0	0
Cholera	0	0	1
Creutzfeldt-Jakob	0	2	7
Diphtheria	0	0	0
Food-borne diseases	12	437	507
of these, infected abroad	0	105	83
Gonorrhoea	3	401	264
Haemorrhagic fever	0	0	0
Hepatitis A	2	53	184
of these, infected abroad	0	17	53
Hepatitis B (acute)	1	30	31
Hepatitis B (chronic)	3	112	107
Hepatitis C (acute)	0	1	2
Hepatitis C (chronic)	0	249	249
HIV	1	210	242
Legionella pneumonia	9	99	82
of these, infected abroad	4	38	25
Leprosy	0	0	0
Leptospirosis	0	9	5
Measles	0	2	0
Meningococcal disease	0	73	80
of these, group B	0	36	44
of these, group C	0	19	11
of these, unspec. + other	0	18	25
Mumps	0	7	1
Neuroborreliosis	2	67	98
Ornithosis	0	17	5
Pertussis (children < 2 years)	3	128	177
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	1	3
Listeria monocytogenes	0	1	2
Streptococcus pneumoniae	0	88	81
Other aethiology	0	13	6
Unknown aethiology	0	12	12
Under registration	4	21	-
Rabies	0	0	0
Rubella (congenital)	0	0	0
Rubella (during pregnancy)	0	0	0
Shigellosis	0	86	63
of these, infected abroad	0	68	52
Syphilis	1	105	108
Tetanus	0	2	0
Tuberculosis	8	356	341
Typhoid/paratyphoid fever	0	30	20
of these, infected abroad	0	28	18
Typhus exanthematicus	0	0	0
VTEC/HUS	2	131	122
of these, infected abroad	0	46	23

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 41 2005	Cum. 2005 ²⁾	Cum. 2004 ²⁾
Bordetella pertussis (all ages)	10	418	765
Gonococci	9	360	305
of these, females	3	39	39
of these, males	6	321	266
Listeria monocytogenes	1	31	29
Mycoplasma pneumoniae			
Resp. specimens ³⁾	29	769	192
Serum specimens ⁴⁾	14	620	305
Streptococci ⁵⁾			
Group A streptococci	0	88	100
Group B streptococci	1	63	65
Group C streptococci	0	19	18
Group G streptococci	0	94	86
S. pneumoniae	16	877	955
Table 3	Week 40 2005	Cum. 2005 ²⁾	Cum. 2004 ²⁾
Pathogenic int. bacteria ⁶⁾			
Campylobacter	76	2847	2932
S. Enteritidis	13	506	399
S. Typhimurium	5	412	379
Other zoon. salmonella	10	452	399
Yersinia enterocolitica	5	182	174

²⁾ Cumulative number 2005 and in corresponding period 2004

³⁾ Resp. specimens with positive PCR

⁴⁾ Serum specimens with pos. complement fixation test

⁵⁾ Isolated in blood or spinal fluid

⁶⁾ See also www.germ.dk

HIV notifications

Notifications received in 2004 have now been checked for duplicates. Fifteen notifications have been deleted.

Patients with laboratory diagnosed chlamydia by gender and county, 2nd quarter 2005

County	2005			2004
	M	F	Total	Total
Cph. + Frb. Municip.	392	673	1,068 *)	1,005
Copenhagen	212	347	559	554
Frederiksborg	103	144	248 *)	263
Roskilde	52	136	188	155
West Zealand	80	165	245	252
Storstrøm	73	136	209	193
Bornholm	6	25	31	22
Funen	175	318	493	426
South Jutland	83	183	266	214
Ribe	87	166	254 *)	212
Vejle	150	204	354	272
Ringkøbing	75	179	255 *)	200
Aarhus	286	495	782 *)	643
Viborg	65	135	200	214
North Jutland	176	354	530	397
Whole country	2,015	3,660	5,682	5,022

*) Gender unknown in a few cases

19 October 2005