



PURULENT MENINGITIS 2001

No. 41, 2002

In 2001, there were 271 patients notified with purulent meningitis.

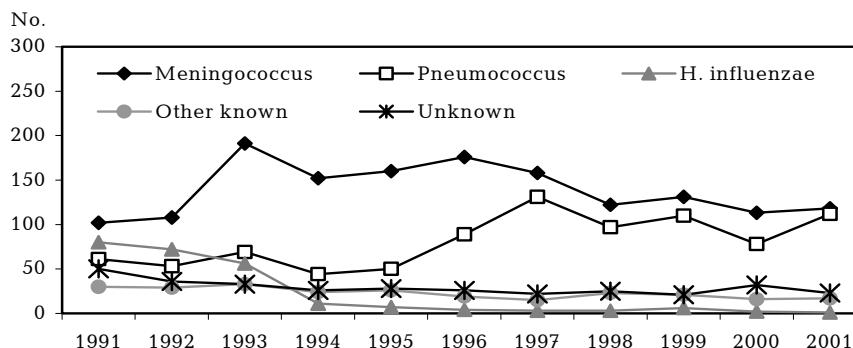
Meningococcal meningitis has previously been described in EPI-NEWS 16/02. Fig. 1 and Table 1 show the aetiology, age distribution and age-specific incidence.

Pneumococcal meningitis

Of the 112 patients notified with pneumococcal meningitis, 58 were males and 54 females. This shows an increase of 34 cases over 2000, EPI-NEWS 49/01, but a similar situation to that in 1999. A reminder was sent for 66 (59%) notifications.

Children <1 year of age accounted for 13% of cases, 66% occurred in persons >40 years and 29% in those >65 years. In at least 61 (54%) patients a predisposing factor had been identified: 33 had otitis media or some other infection in the ear-nose-throat region, 10 had pneumonia, and four had some other infection at the same time. Two patients had a cranial fracture and one had a dural defect. Eight had some other predisposing factor. Three patients had previously undergone splenectomy. One of these had been vaccinated five years earlier, while the other two were presumably unvaccinated. Pneumococci serotypes that are not covered by the 23-valent pneumococcal polysaccharide vaccine were isolated from all three patients. Additional information identified 10 patients with alcohol dependency. Information on sequelae or death was provided in 49 (44%) cases. Twelve persons suffered impaired or loss of hearing. Twelve suffered neurological damage, e.g. hemiparesis, cognitive disturbances or visual impairment, and three suffered other neurological sequelae. A total of 22 (20%) patients died as in relation to the infection. The mortality varied

Fig. 1. No. of patients notified with purulent meningitis, by bacteriological aetiology, 1991-2001



with age: 0-20 years: 13%, 21-60 years: 13%, >60 years: 32%. Moreover, at least five patients developed endocarditis.

H. influenzae meningitis

A six-year-old boy was notified with meningitis caused by *H. influenzae* type B. The boy had previously been healthy and had received three doses of Hib vaccine.

Listeria meningitis

Listeria meningitis was notified in four patients: three males and one female. They were aged between 53-72 years. Two patients had a predisposing factor in the form of another underlying disease. There were three deaths in relation to the infection.

Streptococcal meningitis

Six cases of streptococcal meningitis were notified, of which two were haemolytic group B and three were non-haemolytic. Four patients were females, aged 3 weeks, 30, 38 and 63 years, and two were males, aged 58 and 64 years. One patient suffered sequelae in the form of visual impairment. Two patients, aged 63 and 64 years, respectively, died in relation

to the infection.

Aetiology of other bacterial meningitis

In 2001, there were seven notified cases of meningitis with other known aetiology. Four children, three boys and one girl, aged 6, 8, 8 and 13 days, respectively, suffered meningitis caused by *E. coli*. Two women, aged 70 and 84 years, had meningitis caused by *Staphylococcus aureus*. Both died in relation to the infection. *Klebsiella pneumoniae* was the cause of meningitis in a 39-year-old woman who also had a liver abscess.

Purulent meningitis of unknown aetiology

Twenty-three cases of purulent meningitis of unknown aetiology were notified in 2001. The patients were aged between 0-69 years (median age 31 years). Seven patients had been on antibiotic therapy before the lumbar puncture was carried out (from four hours to several days previously). Five cases had negative MAT (meningococcal antibody test). (A. H. Christiansen, S. Samuelsson, Department of Epidemiology)

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Table 1. No. of patients with purulent meningitis 2001 (2000), by aetiology, age group and age-specific incidence per 10⁵

Age (yrs)	Meningococcus	Pneumococcus	H. influenzae	Listeria	Streptococcus	E. coli	Others	Unknown	Total	Incidence
0	13	14	-	-	1	4	-	3	35	52
1-5	26	14	-	-	-	-	-	3	43	13
6-10	20	1	1	-	-	-	-	-	22	6
11-15	20	2	-	-	-	-	-	-	22	7
16-20	13	-	-	-	-	-	-	3	16	6
21-30	3	2	-	-	1	-	-	2	8	1
31-40	0	5	-	-	1	-	1	5	12	1
41-50	7	11	-	-	-	-	-	2	20	3
51-60	8	22	-	2	1	-	-	1	34	5
61-70	4	21	-	1	2	-	1	4	33	7
71+	4	20	-	1	-	-	1	-	26	5
Total, 2001	118	112	1	4	6	4	3	23	271	5
(Total, 2000)	(113)	(78)	(2)	(6)	(7)	(1)	(2)	(32)	(241)	(5)

Patients with laboratory-diagnosed chlamydia, by sex and county

1st and 2nd quarters of 2002 compared with the corresponding period in 2001

County	1st quarter				2nd quarter			
	2002			2001	2002			2001
	M	F	Total		M	F	Total	
Cph. and Frb. Municip.	250	480	730	750	280	467	747	669
Copenhagen	112	253	366 *	309	130	293	423	344
Frederiksborg	59	113	172	197	54	99	153	182
Roskilde	31	100	131	113	36	98	134	112
West Zealand	66	129	195	206	63	146	209	164
Storstrøm	30	94	125 *	123	40	107	147	124
Bornholm	2	18	20	22	7	19	26	12
Funen	85	221	306	336	105	233	338	285
South Jutland	39	133	173 *	140	53	121	174	168
Ribe	51	96	147	149	51	91	142	125
Vejle	69	176	246 *	232	81	188	269	186
Ringkøbing	49	124	174 *	213	72	142	214	169
Aarhus	203	349	553 *	481	212	405	618	395 *
Viborg	49	109	158	120	43	123	167	90 *
North Jutland	121	277	399 *	433	105	272	377	308
Total	1216	2672	3895	3824	1332	2804	4138	3333

*) Sex unknown in one case

Patients with laboratory-diagnosed gonorrhoea, by sex and county

2nd quarter of 2002 compared with the corresponding period in 2001

County	2nd quarter			2001
	M	F	Total	
Cph. and Frb. Municip.	36	3	39	34
Copenhagen	6	1	7	7
Frederiksborg	5	-	5	3
Roskilde	4	-	4	1
West Zealand	2	-	2	1
Storstrøm	-	-	-	1
Bornholm	-	-	-	-
Funen	1	-	1	4
South Jutland	2	-	2	2
Ribe	1	1	2	-
Vejle	4	2	6	2
Ringkøbing	-	-	-	-
Aarhus	5	-	5	7
Viborg	-	-	-	-
North Jutland	3	1	4	4
Total	69	8	77	66