



ANTIVIRAL CHEMOPROPHYLAXIS AFTER OCCUPATIONAL HIV EXPOSURE, 1998-1999

In January 1998 the Danish National Board of Health issued guidelines for the use of antiviral chemoprophylaxis (post-exposure prophylaxis, PEP) against HIV infection after occupational exposure. At the same time, Departments of Infectious Diseases were asked to report the initiation of such treatments to the Department of Epidemiology. During 1998-1999 the Department of Epidemiology received a total of 41 reports, 27 in 1998 (16 men and 11 women) and 14 in 1999 (3 men and 11 women). The median age was 34 years for women (range 26-56 years) and 36 years for men (range 22-59 years). Table 1 shows the types of exposure that led to the use of PEP, classified by the occupation of the person exposed.

Table 1. Cases of chemoprophylaxis after occupational HIV exposure, 1998-1999

	Exposure		
	Stick/ cut acci- dent	Blood- splash	Physical struggle
Physician	7	-	-
Nurse	8	1	-
Social and Health Ser- vice assist.	2	-	-
Lab. techn.	3	-	-
Dentist	4	-	-
Police officer	1	1	1
Prison officer	1	-	2
Other	3	-	1
Not stated	4	1	1
Total	33	3	5

The majority (80% or 33/41) of cases were needle-stick injuries or cuts, 27 of which occurred during the handling of syringes or needles, the remaining six occurring during surgical operations. In three cases exposure was by blood splashes on mucous membranes or non-intact skin. Five cases were due to physical struggles during which both parties received bleeding injuries or the exposed person was bitten. Nurses made up the largest occupational group, followed by physicians.

In 46% (19/41) of cases, the source of the exposure was known to be HIV positive. Among the others, i.e. of

unknown HIV status, 15 were i.v. drug users and three were from high-endemic areas.

In 38 cases PEP was started on the day of the accident, while in the remaining three cases there was a delay of 1, 2 and 27 days, respectively. PEP was started without delay in all cases in which the source was known to be HIV positive.

Of the 22 potential sources of unknown HIV status, 14 were subsequently tested and found to be HIV negative. This led to discontinuation of PEP 1-21 days after it had been started, the median time being two days. In one case PEP was stopped because of reassessment of the risk, and in two other cases because of side effects after 7 and 14 days, respectively. These two cases were of needle-stick accidents while taking blood tests from a new-born baby of an HIV-positive mother.

In 14 cases information is available on follow-up HIV testing of the exposed persons. All tested HIV negative three months after the accident, and six of these also tested negative six months after the accident. No case of occupationally acquired HIV infection has been reported.

Comment

The considerable decline in the use of PEP after HIV exposure that has been reported from 1998 to 1999 does not necessarily reflect a fall in the number of exposures, but points to an adaptive change in the use of PEP. When the guidelines were issued, it was estimated that the PEP requirement would be for about 10 persons per year. The Danish National Board of Health guidelines do not cover the use of PEP after sexual exposure to HIV.

(J. Duus, E. Smith, Dept. of Epidem.)

NOTIFIABLE DISEASES: REVISED REGULATIONS

The Danish National Board of Health has revised its regulations and accompanying guidelines on the notification of infectious diseases by physicians. These came into force on 1 May 2000. The new communication, no. 277 of 14 April 2000, includes the following changes:

Individual notifications

- In addition to acute hepatitis B and

C, the corresponding chronic infections are now also individually notifiable, as persons with chronic infections also constitute an infective risk. - Infections caused by the entire Mycobacterium tuberculosis complex are now individually notifiable.

Apart from M. tuberculosis, this comprises M. bovis, M. africanum and M. microti.

- Infections due to verotoxin-producing bacteria (VTEC, including E. coli O157) and haemolytic uraemic syndrome (HUS) are now individually notifiable. Guidelines (no. 61 of 14 April 2000) have been drawn up which include recommendations on the management of these infections in child care institutions, nursing homes and hospitals, as well as in relation to the handling of food.

- Clustering of unexplained cases of illness that might be due to a biological agent, but in which the agent has not necessarily been identified, must from now on be notified both by telephone and in writing to the Medical Officer of Health.

Laboratory notifications

- Infections from pathogenic intestinal bacteria must be reported on an ongoing basis, at least once a week, by clinical microbiology departments. There are provisions for electronic reporting. Infections due to any bacterium regarded as the possible cause of an intestinal disease must be reported with the patient's national identity number.

Notification form

Because of these changes to the individual notification system, the notification form has been revised. The previous form 1507 has been replaced by form 1515. Criteria for the notification of each of the individually notifiable diseases are stated both in the guidelines no. 60 of 14 April 2000 and on the back of the notification form.

It is important to ensure that infectious diseases are notified, so that surveillance and preventive measures can be maintained. At the moment, the Department of Epidemiology is having to send reminders for 40-70% of the notifications, when possible, EPI-NEWS 5/00.

(S. Samuelsson, Dept. of Epidemiol.)

Patients with laboratory-confirmed pertussis

2nd quarter of 2000 compared with the same quarter of 1999

	April	May	June	2nd quarter 2000	2nd quarter 1999
< 2 years	13	19	8	40	36
2-17 years	38	71	52	161	125
≥ 18 years	7	7	14	28	27
Total	58	97	74	229	188

From 01.01.1999 figures comprise all pertussis cases demonstrated by culture or PCR.

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