

GONORRHOEA 1999

No. 25, 2000

Laboratory surveillance

In 1999, gonorrhoea was diagnosed in 334 patients, 291 men and 43 women, Table 1. The rising trend in incidence seen since 1996 thus appears to be continuing. This applies especially to men, but 1999 also saw a rise in the number of female cases. The M/F ratio was 6.8. The proportion of male gonorrhoea cases diagnosed in Copenhagen Municipality rose from 33% in 1996 to 56% in 1998 and was 55% in 1999.

Table 1. Patients with laboratory-diagnosed gonorrhoea, by sex, 1995-1999

	Total	M	F	M/F
1995	289	221	68	3.3
1996	178	142	36	3.9
1997	189	154	35	4.4
1998	211	187	24	7.8
1999	334	291	43	6.8

Pharyngeal and rectal gonorrhoea

Swabbing of the pharynx and rectum for gonorrhoea is still too rarely performed. Of the 291 men with gonorrhoea only 8% were swabbed from the pharynx, 32% of these being positive. For the 43 women, the corresponding figures were 12% and 60%, respectively. 8% of men with gonorrhoea were swabbed from the rectum, 54% with positive results.

Resistant gonococci

The frequency of penicillin-resistant gonococci was 40%, and 19% were penicillinase-producing, Fig. 1. This was largely unchanged from the previous five years, whereas the frequency of fluoroquinolone resistance doubled from 13% in 1998 to 27% in 1999; 17% of strains were both penicillin- and fluoroquinolone-resistant.

Treatment of gonorrhoea

The most suitable agent is still ceftriaxone 250 mg i.m. If a fluoroquinolone is used, it is important to perform a control culture at an early stage and consider cases of treatment failure for referral to a clinic for sexually transmitted diseases.

Notified cases

In 1999, a total of 148 cases of gonorrhoea were notified, 131 men and 17 women. This is a rise from 1998, when 104 cases were notified, EPI-NEWS 25/99. The number of notified

Fig. 1. Laboratory-diagnosed gonorrhoea cases 1990-1999, with % due to penicillinase-producing (PPNG) and quinolone-resistant (QRNG) strains

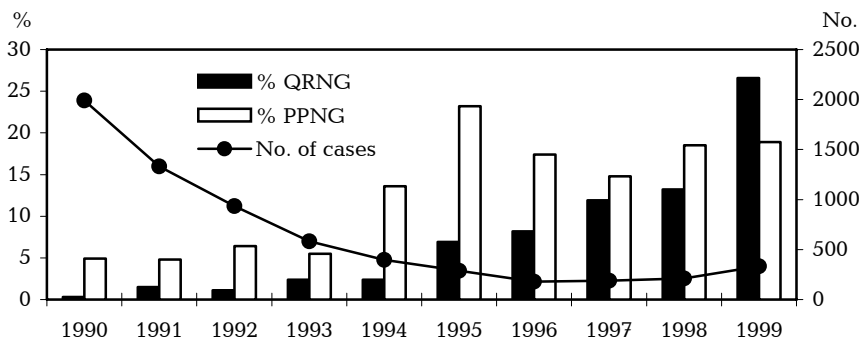
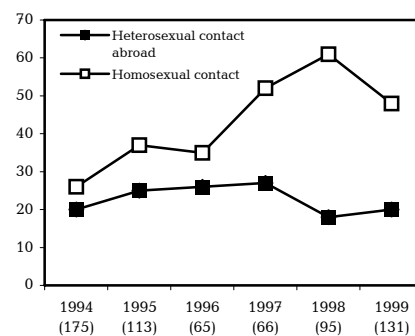


Fig. 2. Percentage distribution of notified male cases of gonorrhoea 1994-1999 by source of infection. Total numbers in ()



cases made up 44% of the laboratory-diagnosed cases. The median age was 32 years for men and 30 years for women. An overall 64% were from the greater Copenhagen area. General practitioners were responsible for 36% of the notifications, while 59% were from clinics for sexually transmitted diseases. There were 32 foreigners/immigrants (22%), 27 men and five women. In 92 cases (62%) it was stated that contact tracing would be undertaken. Of the notified men, 63 (48%) had been infected by other men and 59 (45%) by heterosexual contact, while the source of infection was unstated for nine. All the women were infected heterosexually. Of the heterosexually infected men 28 (47%) were infected in Denmark, eight (14%) in Thailand and three (5%) in Indonesia. 21 heterosexually infected men (36%) were infected by a casual partner and 10 (17%) by a prostitute. 78% (49/63) of the homosexually infected men were infected in Denmark; in 35 cases (56%) the source of infection was a casual partner and none had been infected

by a prostitute. Eight (13%) of the homosexually infected men were HIV positive. Corresponding figures for 1997 and 1998 were 15% and 28%, respectively. In 1994, homosexually infected men and men infected by heterosexual contact abroad together made up 46% of notified male cases of gonorrhoea, Fig. 2. During 1995-1996 these two sources of infection together made up 60%, a proportion that rose to 74% in 1997-1999. The rise is chiefly due to an increase in the numbers and proportion of homosexually infected men.

Comments

Numbers of gonorrhoea cases are increasing, now also in women. The proportion of patients examined for pharyngeal and rectal gonorrhoea remains critically low. This means that the reservoir of undiagnosed cases is still growing. The frequency of fluoroquinolone-resistant gonococci has doubled. There is still a relatively large proportion of homosexually infected men who are known to be HIV positive. This raises the question of whether men who are infected with gonorrhoea by men should always be offered follow-up testing for syphilis, HIV and hepatitis B virus infection. (S. Hoffmann, I. Lind, Dept. of Respiratory Infections, Meningitis and STIs, J. Duus, E. Smith, Dept. of Epidemiology)

DRUG ADDICT DEATHS ABROAD

See overleaf.

21 June 2000



Unexplained illness and deaths among drug addicts in Great Britain and Ireland

Since mid-April 2000 there have been a number of cases of serious septic illness of high mortality among i.v. drug abusers in Great Britain and Ireland. Overdosage, e.g. of heroin, is not suspected, but some contamination of the injected substances with a microorganism or toxin.

Bacteriological tests have shown growth of bacteria including group A streptococci, *Staphylococcus aureus* and *Clostridium* and *Bacillus* spp., but despite intensive investigation no common causative agent has yet been identified.

There are no grounds for inculpating *Bacillus anthracis* infection (EPI-NEWS 20/00).

However, on 15 June Greater Glasgow Health Board reported that *Clostridium* had been found in nine patients and identified in two of these as *Clostridium novyi*, type A. The CDC in Atlanta simultaneously identified the same type of *Clostridium* in a third patient from Glasgow. *Clostridium novyi* type A is a toxin-producing organism. The latest six isolates appear to be of the same type, but their identification is not yet complete. There is thus a probable common cause for the outbreak in Scotland, but it is not clear whether the English and Irish cases are due to the same agent, and the suspected bacterium has not yet been cultured from heroin specimens.

The cases have chiefly occurred in drug addicts who have injected heroin intramuscularly or subcutaneously, followed by the development of an infectious process arising from the injection site.

So far 78 cases have been reported, of whom 37 (47%) have died. There have been 21 cases in England and Wales, 41 in Scotland and 16 in Ireland. The number of deaths in the corresponding areas are 11, 18 and 8, respectively.

As nearly half the cases have shown identical clinical features, British and Irish Health Authorities have produced the following "case definition" in collaboration with the CDC:

"An intravenous drug abuser who after 1 April 2000 has been admitted to hospital or found dead with signs of soft-tissue inflammation in the form of abscesses, cellulitis, fasciitis or myositis at an injection site AND **either** has symptoms of severe systemic toxicity with a leukocytosis $>30 \times 10^9/l$ and a sustained systemic blood pressure <90 mm Hg despite fluid resuscitation **or** has post mortem evidence of a diffuse toxic or infectious process including pleural effusions and soft tissue oedema or necrosis corresponding to an injection site."

In most cases the course of illness has been short, with a few days from the start of illness to hospital admission, and among those admitted to hospital who have subsequently died, most have died within a few days of admission. No similar cases have been reported in Denmark, but Departments of Infectious Diseases, Microbiology, Forensic Medicine and Surgery, as well as Casualty Departments throughout the country, are especially urged to be on the alert for drug abusers who show or have shown the above-mentioned clinical features or post-mortem findings. In suspected cases, specimen material should be obtained for culture of anaerobic organisms, including *Clostridium novyi*, type A. British recommendations are to start antibiotic treatment covering anaerobic bacteria as soon as possible in suspected cases, together with surgical exploration and drainage of the infection.

Clinical cases that fulfil the above case definition in whole or in part must, in accordance with the National Board of Health, from today and until further notice be reported in writing to the local Medical Office of Health and to the Department of Epidemiology, Statens Serum Institut, for which purpose it may be convenient to use Form 1515.

If necessary, further information will be given on Statens Serum Institute's home page and in EPI-NEWS.

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