Epidemiological study

THE CURRENT SITUATION CONCERNING SYPHILIS AND GONORRHOEA IN SLOVENIA

M. Potočnik and M. Barač

ABSTRACT

The epidemiological situation of syphilis and gonorrhoea in Slovenia in 1994 is the subject-matter of the present paper. During the past twenty years, syphilis was on a distinctive decline in Slovenia. In 1994, 36 cases of early syphilis were registered, representing an incidence of 1.82 per 100 000 inhabitants and equaling the situation 12 years ago. A continuous decline in gonorrhoea was also registered, the incidence in 1994 being 10.7 per 100 000 inhabitants, but due to known reasons this data are not reliable. Since Slovenia borders the crisis territories of former Yugoslavia, sexually transmitted diseases demand particular attention of public health authorities and also close cooperation of venereologists from the countries of the Alps-Danube-Adriatic region.

KEY WORDS

syphilis, gonorrhoea, epidemiology, Slovenia.

INTRODUCTION

Slovenia has very reliable data on formerly venereal and presently termed classic sexually transmitted diseases (STD) (syphilis, gonorrhoea, ulcus molle, lymphogranuloma venereum) since reporting them has been compulsory by law since 1948 (1). The patients are registered and in the majority of cases also treated in 9 dermatological outpatient STD clinics that cover the needs of the entire country (population 1990 623). The data are reported monthly to the STD Registry Office at the Department of Dermatology of the Ljubljana University Medical Centre which provides a cumulative annual report and analysis.

During the past 20 years, the incidence of classical STD in Slovenia, syphilis and gonorrhoea, followed the trend in western Europe (2). Syphilis increased in the seventies, started to decline toward the end of the decade and followed such a persistent decline that in the years 1992 to 1993 only two cases of early syphilis were registered in the entire country, meaning an incidence of 0.10 per 100,000 inhabitants. Surprising were the data for 1994 when 36 cases of early syphilis were registered in the entire country, meaning an incidence of 1.82 per 100 000 inhabitants (1,2,3, 4,5) (Fig. 1).

Just like in other European countries, during the second World War and in the following period gonorrhoea was widely spread in our country. In

the early fifties the disease started to decline. It then began to increase again, reaching its climax in 1975, after that it began to decline steadily (1,2,3,4). Thus the incidence rate in 1994 amounted to 10.7 per 100 000 inhabitants (5) (Fig. 2).

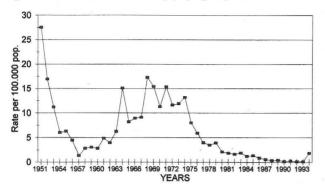


Fig. 1. Rates of early syphilis in Slovenia, 1951-1994.

Both the increase in early syphilis prevalence as well as the decline, in gonorrhoea merit a detailed analysis which will provide the guidelines for an effective repression of these two as well as other STD.

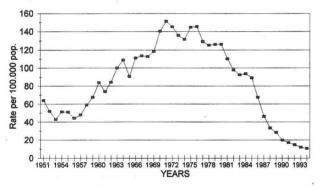


Fig. 2. Rates of gonorrhoea in Slovenia, 1951-1994.

The study includes all patients with established early syphilis or gonorrhoea who were reported and in most cases also treated at the 9 dermatological outpatient STD clinics in Celje, Nova Gorica, Koper, Kranj, Ljubljana, Maribor, Murska Sobota, Novo mesto and Ravne.

Syphilis and gonorrhoea were observed with regard to the stage of disease (syphilis only), geographical region, sex, age, profession and marital status of the patient, whether the patient had recovered from a previous venereal disease, whether the infection occurred under the influence of alcohol, following intercourse with a prostitute, in Slovenia or abroad.

RESULTS

Early syphilis includes primary, secondary and early latent cases. In 1994, 36 cases of early syphilis, which had been on the decline since 1974, were discovered and treated in Slovenia (Tab. 1). Out of the patients with early syphilis, 25 were men (69.4%) and 11 women, (30.6%). 15 patients (41.7%) were married, 19 (52.8%) single and 2 (5.5%) were widowers. Intercourse with a prostitute was the source of infection with syphilis in 3 patients (8.4%). 2 patients (5,6%) previously had a venereal disease. Under the influence of alcohol, 6 patients (16.7%) had become infected with syphilis. Intercourse with a prostitute was the source of infection in 3 patients (8.4%). The source of infection was established in 15 patients (41.7%), in 21 (58.3%) it could not be established. The infection occurred in Slovenia in 25 cases (69.4%) and abroad in 11 cases (30.6%).

In 1994, 9 cases of late syphilis (8 cases of latent and 1 case of neurosyphilis) were discovered and treated. Since 1986 no case of juvenile congenital syphilis has been discovered.

The prevalence of gonorrhoea (all forms) is on the decrease since 1975, so that in 1994 only 211 cases were discovered and treated (Tab. 2). 156 of the patients were men (74%) and 55 women (26%). 59 patients (28%) were married, 122 (57.8%) single, 9 (4.3%) divorced and for 21 (9.9%) no data were available. 29 (13.7%) had previously had a venereal disease. Under the influence of alcohol 21 (9,9) patients had become infected. The intercourse with a prostitute was the source of infection in 8 patients (3.8%). The source of infection was established in 99 patients (46.9%). The place of infection with gonorrhoea was in Slovenia in 164 cases (77.7%), in 47 cases (22.3%) the infection occurred abroad.

DISCUSSION

The highest incidence of syphilis was in the region of Ljubljana, the administrative and industrial centre at international crossroads. It was also high in the industrial region of Celje, whereas in the Koper region with its international seaport, where according to data from literature (4) a higher incidence might have been expected, it only amounted to 0.73 per 100,000 inhabitants.

The male-female ratio is in accordance with data from literature (5,6,7). No new case of syphilis was registered in the age group up to 15 years, the

Tab. 1. Early syphilis - according to geographical regions in 1994

Region Number of cases		%	Number of cases/100 000 pop. in the region
Celje	8	22.2	3.6
Nova Gorica	0	0.0	0.0
Koper	1	2.8	0.7
Kranj	0	0.0	0.0
Ljubljana	25	69.4	4.2
Maribor	0	0.0	0.0
Murska Sobota	0	0.0	0.0
Novo mesto	1	2.8	0.7
Ravne na Koroškem	1	2.8	0.7
Slovenia	36	100.0	1.8

majority of cases were registered in the age group from 30 to 39 years with men prevailing (90%). 6 patients (16.7%) belong to the age group between 15 and 19, and this group demands special attention. The majority of early syphilis cases were among industrial workers (39%). With regard to marital status it was established that most patients with early syphilis were single (52.8%). The source of infection could only be ascertained in 41.7%, which is below the percentage quoted by west European authors (7,8). The majority of infections (69.9%) were acquired in Slovenia, similar data are also valid for Switzerland (61%) (8,9). Intercourse with a prostitute is presumably the source of infection in 3 patients (8.4%), but these as well as data regarding intoxication with alcohol are unreliable.

The number of newly discovered and so far untreated cases of late syphilis is now lower than it used to be in past years. In 1994, 8 cases of latent and one case of neurosyphilis were registered. Most cases were discovered during regular blood donations

and some were revealed during pregnancy screening tests.

No case of congenital syphilis was discovered in our country in 1994. The most recent case of juvenile congenital syphilis was discovered in 1986 and a case of late congenital syphilis in 1989. These data are very encouraging since in contrast to the situation in the USA where between 1981 and 1991 congenital syphilis was on the increase (10). With regard to the fact that this form of syphilis is often related to drug addiction (2) which is also increasing in our country, serological tests for syphilis should be carried out consequently in pregnant women.

Like in Western Europe, the number of gonorrhoea cases, including all stages and forms of the disease, has been decreasing steadily since 1981 (3,5,6). Thus the incidence in Slovenia decreased from 19.8 per 100.000 inhabitants to 10.7 during the past five years, which means 211 cases. Morbidity was highest in the Ljubljana region (54.4%). The male female ratio was approximately 3:1, as in all past years.

Tab. 2. Gonorrhoea - according to geographical regions in 1994

Region	Number of cases	%	Number of cases/100 000 pop. in the region
Celje	33	15.6	15.0
Nova Gorica	5	2.4	4.8
Koper	4	1.9	2.9
Kranj	7	3.3	3.6
Ljubljana	115	54.4	19.5
Maribor	21	9.9	6.0
Murska Sobota	1	0.5	0.8
Novo mesto	13	6.2	9.8
Ravne na Koroškem	12	5.7	9.8
Slovenia	211	100.0	10.7

The largest number of female patients was registered and treated in the regions of Celje, Ravne and Ljubljana (34-29%). The majority of patients were aged between 20 and 29 (50.7%) and between 30 and 39 (27.0%). 7.6% of patients belong to the age group of 15 to 19, there was no case under the age of 15. Most patients (17.5%) were employed in industry, a relatively high percentage was in transport and catering. 57.8% of the patients were single, 13.7% had had a previous venereal disease. 3.8% had become infected during intercourse with a prostitute, but for one third of all the patients such data are not available. Besides, these data as well as those regarding intoxication are unreliable. The source of infection was established in 46.9% of patients, 22.3% had been infected abroad, mostly in the countries of former Soviet Union and Yugoslavia. In Switzerland the percentage of patients who had been infected with gonorrhoea abroad amounts to 37% (9).

CONCLUSIONS

1. According to data from our country for the year

- 1994, syphilis is on the increase again after almost 25 years of decreasing.
- 2. The higher incidence of infections with syphilis is presumably also the consequence of changed social conditions in the regions of former Yugoslavia and Soviet Union, of poorer living conditions, illegal prostitution and the spread of drug addiction. A possible explanation for the increase of syphilis could be found in Burckhardt's prediction of a higher incidence of this disease around the year 1995 (11).
- 3. Due to not always exact diagnostic procedures, not strict reporting of cases and the use of antibiotics by population at large, the data regarding the incidence of gonorrhoea are not completely reliable.
- 4. The present epidemiological situation concerning syphilis and gonorrhoea, as well as the remaining STD, demands the cooperation of all physicians in the country. Since the countries of the Alps-Danube-Adriatic broader area are exposed to the immigration currents from the former Eastern bloc states a close cooperation of corresponding Public Health Authorities should be promoted in order to prevent the spread of STD.

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