Epidemiological study

SCABIES IN SLOVENIA DURING THE 1971-95 PERIOD

B. Kralj, A. Kansky, B. Žgavec and A. Kraigher

ABSTRACT

Scabies started to appear in Slovenia in larger number by the end of sixties. For this reason a reporting system was enforced by the Ministry of Health. Reliable data are available since 1971. The peak incidence (4,3‰) with 8646 cases was reached in 1972 while a second peak with 4412 cases (2,2‰) appeared in 1982. The yearly incidence of over 1000 cases still persists.

From the clinical experience it was concluded that the majority of cases were imported by guest workers from the underdeveloped regions of former Yugoslavia.

KEY WORDS

scabies, epidemiology, Slovenia, 1971-1995 period

INTRODUCTION

In the past the spread of scabies in various populations accompanied periods of wars and other major distresses, especially, when economic and hygienic conditions were rather poor. Available data confirm that the incidence of scabies in Europe has had a cyclical course, the causes of which are still not fully understood. As already mentioned war conditions favor the outbreak of scabies. However, other factors seem to be important too. In Great Britain the incidence of scabies was rising before the outbreak of World War II. While during the years 1944-46 between 10% and 15% of all patients attending dermatological departments were affected with scabies, by the 1950-53 period this figure dropped to 1% (1).

Since 1963 the incidence in Europe was on increase again. In various parts of Britain during the years 1964-66 7% to 11% of dermatologic patients were affected. In France the surge of scabies was also noted in 1963 (2) and was explained by immigration of workers from North Africa. In Germany numerous patients with scabies started to appear by the year 1965 (3,4).

In Slovenia the reappearance of scabies was most probably connected with the epidemiological situation concerning scabies in the republics of former Yugoslavia, where it started to spread from the eastern to western parts in 1963. In Macedonia the epidemy of scabies started in 1963 following the terrible earthquake in Skopje in 1962 (5). At the same time or a bit later the spread was noted in Bosnia (6)

and a few years later in Serbia (7,8). The first alarming report from Slovenia was in 1968 by Adamčič (9).

METHODS

In the late sixties when an increased number of scabies cases started to appear the laboratory identification of scabies mites was carried out at the mycological laboratories of the University Department of Dermatology in Ljubljana and at the Dermatology department of the General Hospital in Maribor and soon also in the dermatology departments in Celje and Novo mesto. Later on practicing dermatologists were encouraged to do the microscopic investigations by themselves.

In view of the large number of affected persons the Ministry of Health of Slovenia enforced in 1968 the reporting of all new cases of scabies. The reports were submitted to the Central Institute of Hygiene in Ljubljana. Due to the well organized dermatological care and to the mentioned reporting system reliable data on the incidence of scabies in Slovenia are available since 1971.

RESULTS

The available data show that since 1971 infections with scabies persist in the population of Slovenia in spite the fact that the great majority is living reasonable well including appropriate housing conditions. From the Fig. 1 it is evident that two peaks were observed: the first one with 8646 cases in 1972 (4,3‰ of population) and the second one with 4412 in 1982 (2,2‰). In between these two peaks the lowest incidence amounting to 2422 cases (1,2‰) was observed in the 1978. During the last 10 years a definite declining incidence is evident but it did never drop under 1000 cases per year. The population of Slovenia in 1971-95 period was approximately 2 millions.

Three rather characteristic lesions observed in our patients are presented in figures 2 to 4.

DISCUSSION

In the literature there are many publications dealing with the incidence of scabies in various populations,

Fig. 1. Numbers of registered cases of scabies in Slovenia in the period from 1971 to 1995.

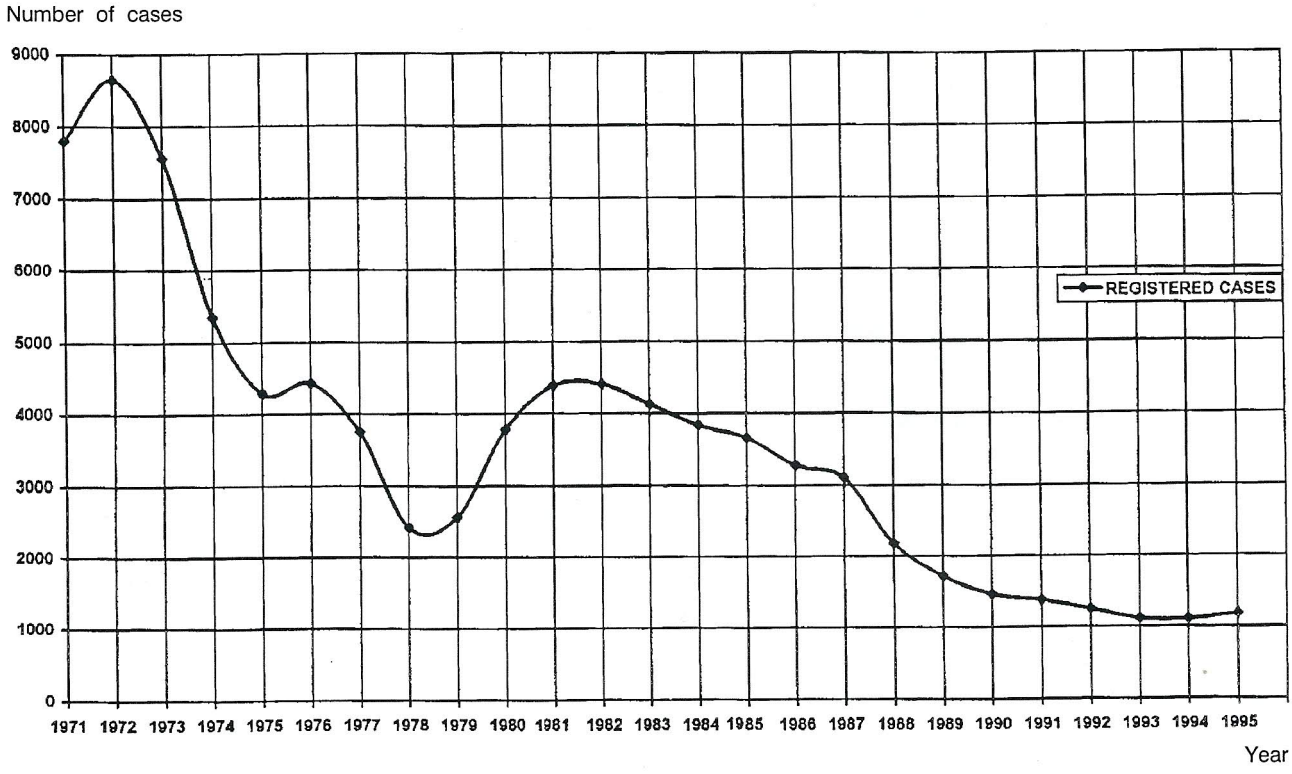

Fig. 2. Typical furrow on the penis shaft.

only a few of them are however epidemically and statistically appropriate. The publication by Konstantinov et al. (5) is highly instructive explaining the origins of the epidemic of scabies in Macedonia during the 1963-74 period. After the disastrous earthquake in Skopje in 1962 the inhabitants were evacuated to rural areas or constraint to live under primitive housing conditions in Skopje. The authors are indicating that in the years preceding the earthquake, endemic foci of scabies existed in remote villages where the evacuated inhabitants got infected. Konstatinov et al concluded that the number of evacuees got infected and started to spread the infection upon their return to Skopje. The fact that a too long period of time elapsed before dermatologists and general practitioners be came aware of scabies was also important.

The incidence of scabies in Slovenia is characterized by a major peak in 1972 and a minor one in 1981 and 82. As it can be detected from fig. 1 scabies is

Fig. 3. Papular probably already granulomatous lesions on the buttocks.

continuously present in the Slovenian population since the outbreak of the epidemic but is definitely on decline. The persistence of scabies lasting for almost 20 years is still not completely explained. It is assumed that the primary cause were the guest-workers from the under-developed parts of former Yugoslavia who used to come to Slovenia in elevated numbers during the late sixties and early seventies. Many of them were successfully treated for scabies

Fig. 4. Papular lesions on the elbow.

here, but experienced a recurrence after visits to their families living in native villages. Such observations were rather frequently made by our dermatologists and also by general practitioners. Since the independence of Slovenia in 1991 less guest workers are coming to Slovenia, however the basic problem still persists.

Additional contributing factor to the spread of scabies are promiscuity, poor housing and alcoholism, while drug addiction seems to have been of minor importance. The observation that in persons paying attention to their personal hygiene the clinical symptoms may be scarce and therefore difficult to diagnose.

Awareness of Slovenian dermatologists of the problem, good possibilities for laboratory confirmation of the diagnosis as well as the efficient reporting system may be credited for curbing the spread of scabies.

CONCLUSIONS

The main factors contributing to the spread of scabies in Slovenia during the period under observation may be listed as follows.

1. it may be safely assumed that guest-workers from the undeveloped parts of former Yugoslavia imported scabies from endemic foci

2. many of them were successfully treated in Slovenia but were reinfected during the visits of their families

3. poor housing and low hygienic habits in a minor section of Slovenian population has also to be taken into account.

4. promiscuity and alcoholism are already well known promoting factors of scabies

5. drug addiction seems to have been of minor importance

According to the experience obtained in Slovenia certain suggestions can be made in order to keep scabies under control.

Well organized medical services and efficient reporting system are to be credited for curbing epidemic in Slovenia.

Dermatologists should be aware that scabies may appear even during periods of general well being. General practitioners should be encouraged to recognize even atypic cases of scabies. The laboratory confirmation of mites should be available for patients with itching and unclear symptoms.

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