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Epidemiological features of cervical carcinoma in young women of Slovenia

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According to the data of the Cancer Registry of Slovenia in the period 1987–1989, cervical cancer represented 27% of all cancers in young women of Slovenia. The age specific incidence was 11/100 000 women, and the cumulative rate (0–34) 0.14/100. With these rates Slovenia was placed in the middle of the rank order of 21 selected European regions and countries. The rates for women aged 25–34 had been increasing till the year 1965, and were rather stable afterwards. An obvious increase has not yet been registered. Before the age of 25 invasive cervical carcinoma has been a very rare phenomenon in Slovenia since 1950 (one or two cases per year). A more detailed analysis of the period 1975–1989 revealed rather stable invasive cancer rates. In the 80's intraepithelial cancer rates have been decreasing, a tendency towards decline in the percentage of the localized stage as well as of the FIGO IA stage was noted. In the case that the described tendency continues, an increase in the invasive carcinoma rates in young women of Slovenia can be expected. The described situation calls for further analysis and action, considering Recomendations of the committee of cancer experts on cervix uteri cancer screening, 6 April 1992.

Key words: cervix neoplasms-epidemiology, adult; Slovenia; cervix uteri cancer, young women, incidence in Slovenia, stages.

Introduction

The Cancer Registry of Slovenia was founded at the Institute of Oncology in Ljubljana in the year 1950 on the initiative of Profesor Ravnihar. It is a special service for collecting, processing and analysing cancer incidence and cancer patient survival data in Slovenia.

Cervical carcinoma has been one of the most frequently analysed primary cancer sites.[1–4]

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For the purpose of the 8th ESGO congress in Ljubljana an analysis of the incidence of this carcinoma in young women was prepared.

Methods and data

Standard descriptive epidemiological methods were used, crude incidence rate being defined as the rate of all cancer cases per 100 000 population, and cumulative risk as the risk which an individual would have of developing a cancer in question during a certain age-span if no other causes of death were in operation.

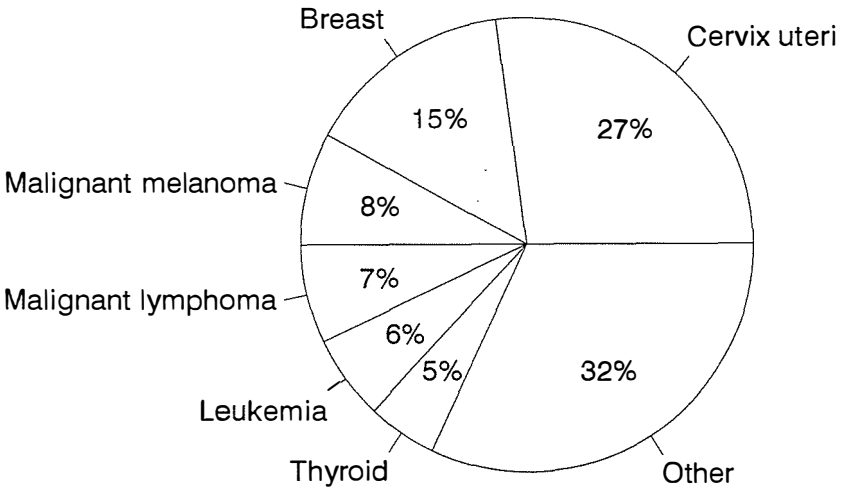

Figure 1. Six leading cancer sites in women aged 20-34 years, Slovenia 1987-89.

The cumulative rate is an approximation to the cumulative risk. It is the sum over each year of age of the age specific incidence rates taken from birth to the age of 34 for 0–34 rate, and to the age of 74 for 0–74 rate.[5]

Data for Slovenia were taken from the computerised data base of the Cancer Registry, and data for other European countries were taken from the last Volume of the publication Cancer Incidence in Five Continents, where only data of high quality cancer registries are published.[6]

Results

In young women, defined by the age 20–34 years in the period 1987–1989, cervical carcinoma was still the most frequent primary cancer site in Slovenia. It represented 27% of all cancers in young women (Figure 1). The age specific incidence rate was 11/100 000 women, and the cumulative rate 0–34 was 0.14/100. These rates placed Slovenia in the middle of the rank order of selected European regions and countries (Figure 2). In fact, its cumulative rate represented the median value.

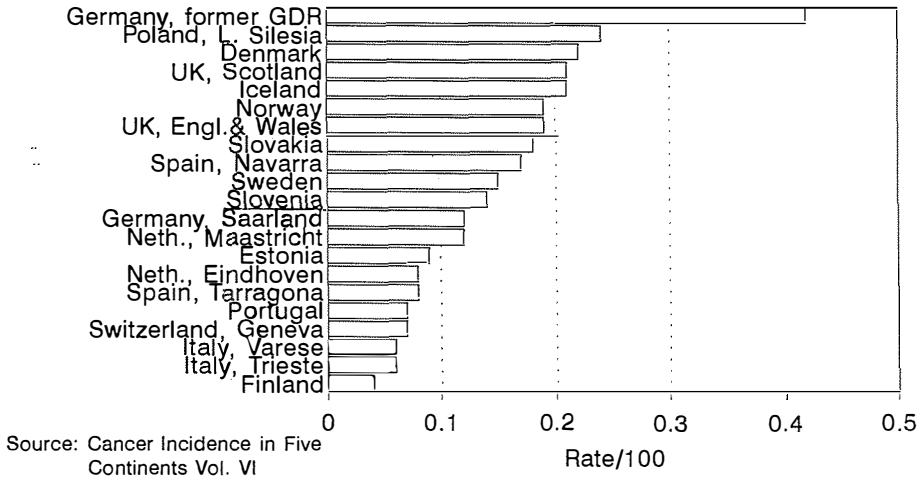

Figure 2. Cumulative cervical cancer incidence rates in young women 0-34, Europe 1983-1987.

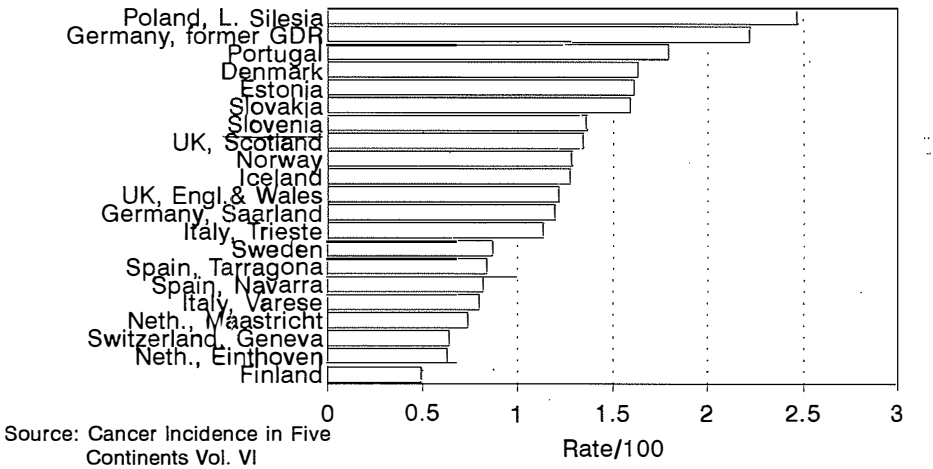

Figure 3. Cumulative cervical cancer incidence rates 0–74, Europe 1983-1987.

The problem of young women does not always reflect the magnitude of the burden of this disease in the studied population. In the rank order of cumulative rates 0–74, Slovenia was in the upper half (Figure 3). The risk of a woman in Slovenia to get cervical cancer till her 75th birthday in the studied period was still 1.4/100.

In Figures 4 and 5 time trends of crude cervical cancer incidence rates for all women and age specific rates for the younger ones are plotted. Invasive and intraepithelial cervical carcinoma rates are given together because at present the incidence in Slovenia, as elsewhere in the world, reflects both exposure to risk factors and level of screening activity. In whole Slovenia an opportunistic screening activity has been going on since the year 1960.[1–4] It was started earlier, i. e. in 1953 in three regions only. These screening activities are mainly reflected in the intraepithelial cervical carcinoma rates. The crude rates of invasive carcinoma had been decreasing till the year 1979, whereas the age specific rates for younger women aged 25–34 had been decreasing till the year 1965 only and were relatively stable afterwards. Be-

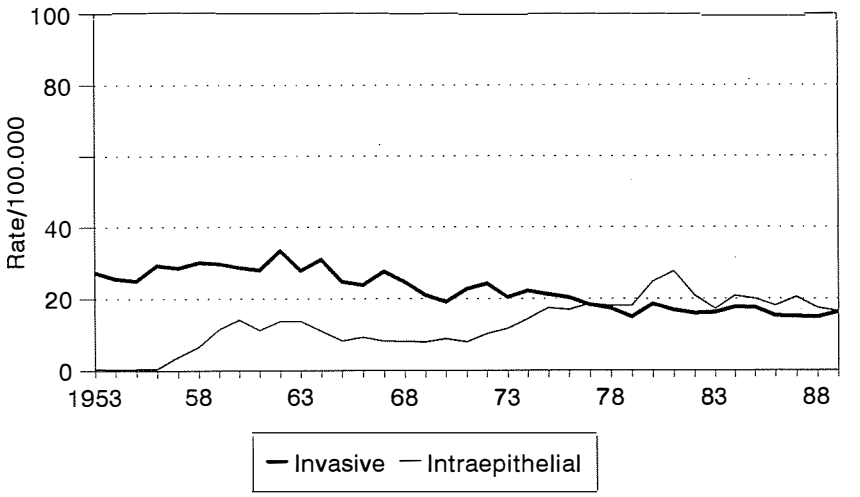

Figure 4. Incidence of invasive and intraepithelial cervical carcinoma, Slovenia 1953-1989.

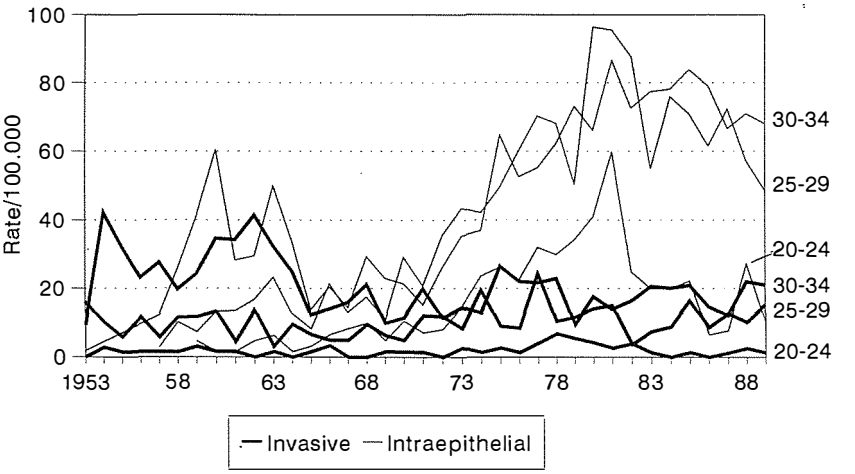

Figure 5. Incidence of invasive and intraepithelial cervical carcinoma in young women, Slovenia 1953-1989.

fore the age of 25 invasive cervical carcinoma has been a very rare phenomenon in Slovenia since 1950; 1 or 2 cases per year have been registered, only.

The incidence in young women in last 15 years was analysed in more detail. Besides rather stable invasive carcinoma rates, the intraepithelial carcinoma rates were greatly varying, with a peak in 1980–1982 for all three age groups 20–24, 25–29, and 30–34yrs. Later a decreasing tendency was noted in all three age groups (Figure 5). The invasive carcinoma rates were rather stable. At some time points only, an increasing tendency was observed.

The stage distribution of all invasive carcinoma cases in the 15 year period with rather stable rates was much more favourable for younger women then for the elderly (Figure 6). Unfortunately, in time trends of the stage distribution an unfavourable tendency was noticed in young women in Slovenia (Figure 7). The percentages of the so called localised stage were slightly decreasing with time, the decrease was not statistically significant as the confidence

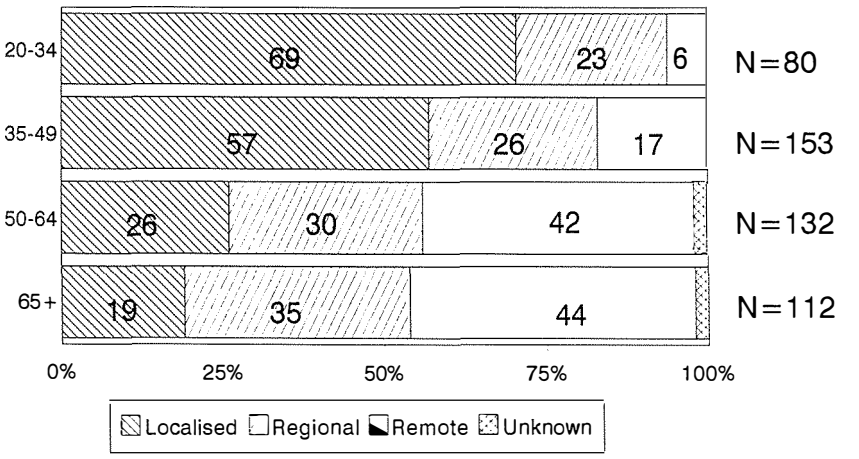

Figure 6. Stage distribution of cervical carcinoma by age, Slovenia 1987-89.

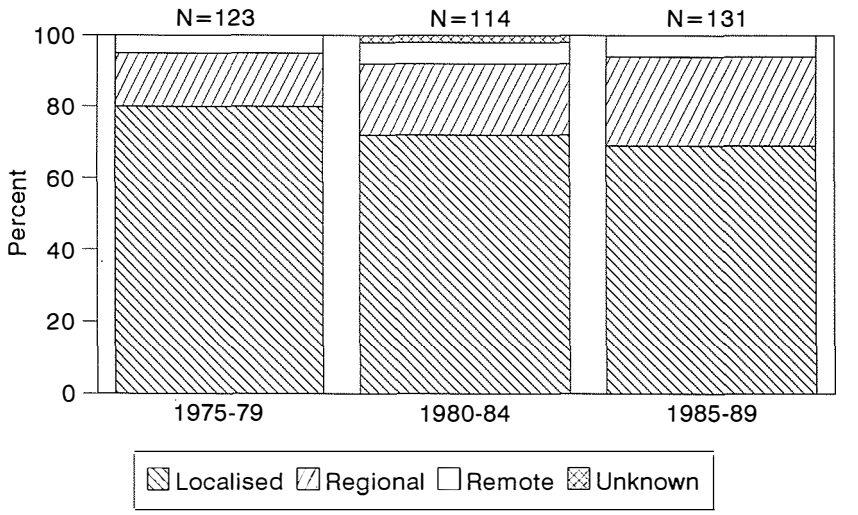

Figure 7. Stage distribution of cervical carcinoma in young women, Slovenia 1975-1989.

intervals were overlapping. In the analysis of FIGO Stage I distribution into A and B stages (Figure 8) a tendency to a less favourable stage distribution was also noticed in the eighties.

Conclusion

In 1987–1989 in young women of Slovenia cervical carcinoma was still the most common cancer site with an age-specific rate of 11/100 000 women. The incidence rates have been rather stable over a long time period despite the opportunistic screening going on in the whole state since the year 1960. Considering different time periods, an obvious increase in the incidence of invasive form could not be confirmed either.

The results of a detailed analysis of the last 15 year period: in the 80's a decrease in the intraepithelial carcinoma rates, a tendency to-

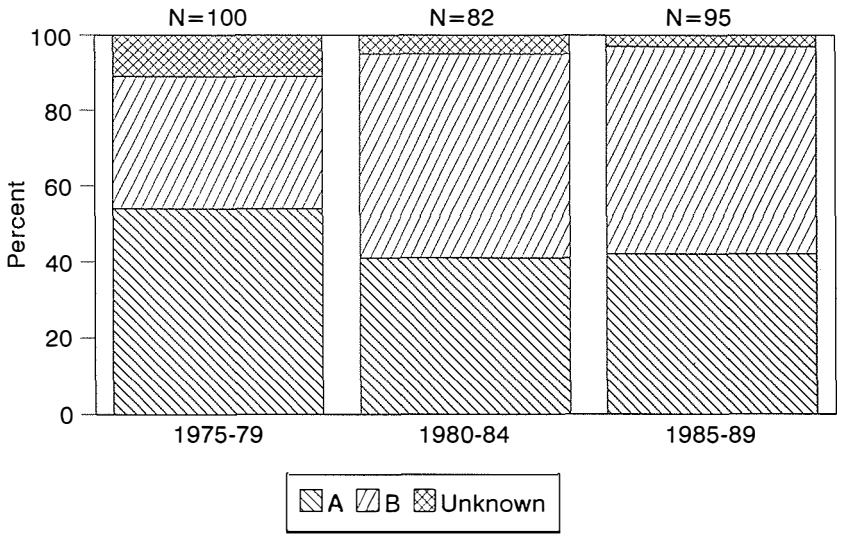

Figure 8. Distribution of A and B FIGO I. stage of cervical carcinoma in young women, Slovenia 1975-1989.

wards a decline in the percentage of the localised stage as well as of the Figo IA stage are a reason for concern, however.

If the described tendency continues, an increase in the invasive carcinoma incidence in young women of Slovenia could be expected as well.

Considering the last European guidelines for Quality Assesment in Cervical Screening[7] the following questions are posed:

Is it the opportunistic screening in Slovenia, as it is, the right way?

What is the quality of taking and reading cervical smears in Slovenia?

Were the registered Stage IB cases the so-called fast growing carcinomas or they occurred to women not assessed by the opportunistic screening practised in Slovenia? In the case they were reached, what was the quality of taking and reading smears?

The situation calls for further analysis and action.

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