

Dermato-Venereology in the Nordic Countries

Patients with Condyloma Acuminatum – an Increasing Burden

A Characterisation of Patients Attending an Inner-City STD Clinic in Copenhagen

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Summary

Objectives: To assess both the resources used for diagnosis and treatment, and the outcome of routine treatment of genital warts.
Methods: A retrospective analysis of consecutive new registered cases of genital warts diagnosed during a 7-

month period in 1998 in an inner-city STD clinic in Copenhagen.

Results: A total of 301 patients were diagnosed with condyloma acuminatum. In the examined 7-month period, 1284 (13%) of 9998 visits to the clinic were related to treatment of patients with genital warts. The data showed that the average patient was a heterosexual male in the early twenties. The mean number of treatments given were 4, however with a wide variation. Routine treatment resulted in rapid clearing of warts in approximately half the population, whereas a more protracted course was observed in the other half of the patients. As a consequence the mean duration of warts in the total population was as high as 18 months.

Conclusion: Of the resources available in the clinic, a significant share is directed towards treatment strategies in order to improve patient care,

especially in those with recalcitrant condylomas. Establishing special genital wart teams or wart clinics with highly trained and experienced personnel, may be an option to further improve the handling of the increasing numbers of patients with refractory ano-genital warts.

Key words: condyloma acuminatum; genital warts; treatment

Introduction

During the last 7-years a dramatic increase in diagnosed new cases of condyloma acuminatum has taken place in an inner-city STD clinic in Copenhagen. From 1985 to 1995 a mean of 149 cases were seen each year, gradually increasing to 778 cases in 2000, making condylomas the most prevalent STD in the clinic (Fig. 1).

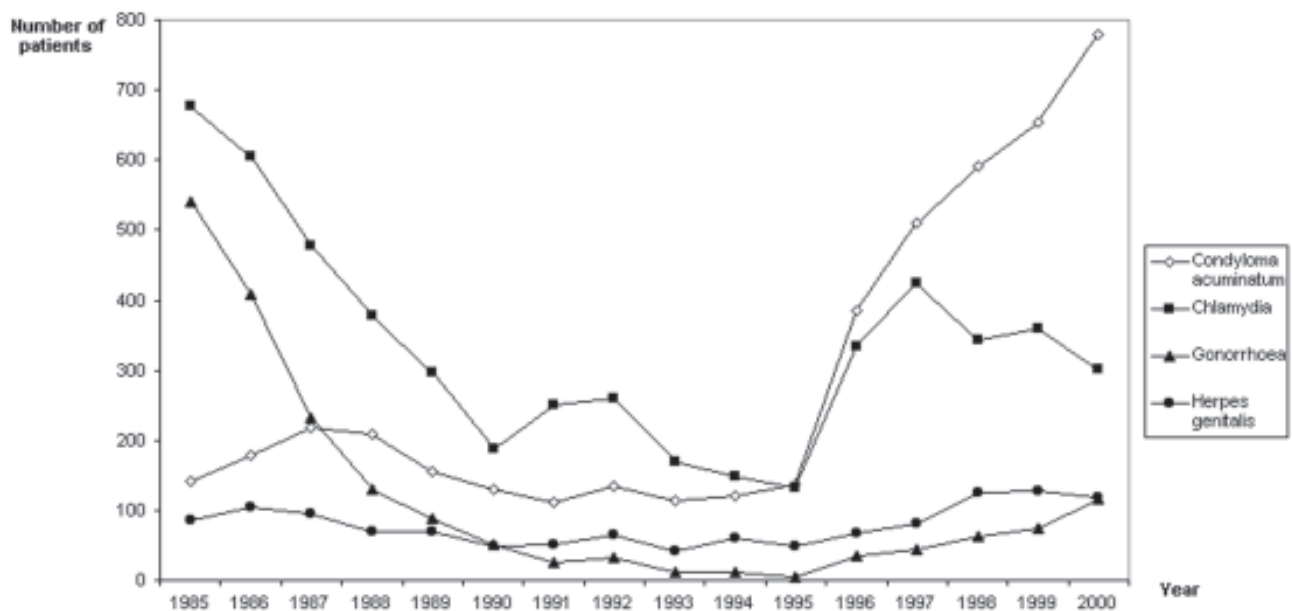


Fig. 1: Numbers of new patients diagnosed and treated in an inner-city STD clinic in Copenhagen from 1985 to 2000.

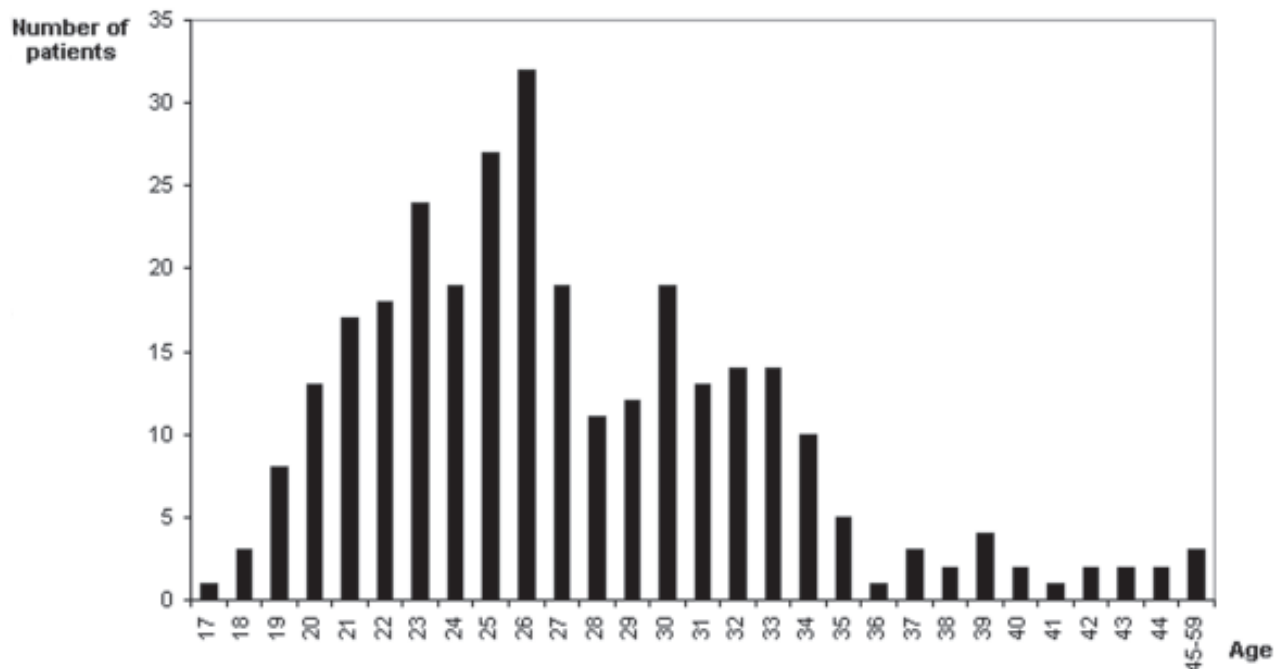


Fig. 2. Age distribution of 301 patients with condyloma acuminatum, seen during a 7-month period in 1998.

In order to assess the care of the patients presenting with genital warts we have characterised a group of consecutive patients seen during a 7-month period in 1998.

Methods

We conducted a retrospective analysis of available data in files from 301 consecutive patients presenting with genital warts during a 7-month period in 1998. The following parameters were extracted from the files: age, gender, sexual orientation and number of sexual partners during the last 6 months. Other information included was: treatment given, numbers and duration of treatment and overall cure rate. The total numbers of visits used for treating condylomas were also noted.

Results

Demographic data

A total of 301 patients, 210 men (70%) and 91 women (30%), had a diagnosis of genital warts in a 7-month period in 1998.

The age distribution of the genital wart population is shown in Fig. 2. The mean age was 27 (range: 17–59), with a two-peak distribution in the mid-twenties and early thirties (Fig. 2).

Information on sexual preference available for 261 (87%) of the 301 patients showed that 237 (91%) were heterosexuals and 24 (9%) were homosexuals.

Records of the numbers of sexual partners in the 6 months preceding the visit were available for 217 (72%) of the 301 patients. A total of 118 (54%) had had one sexual partner, 31 (14%) had had 2 sexual partners, 50 (23%) had had 3–6 sexual partners

Table I. Treatment modalities given to 289 patients with genital warts attending an STD clinic in 1998.

Treatments	No. of patients
Podophyllin 20% solution	260
Podophyllotoxin 0.5% solution	45
Freezing with liquid nitrogen	160
CO ₂ laser	61
Surgery (scissor excision)	49
5-fluorouracil crème 5%	11
Imiquimod crème 5%	3
Interferon alpha	1
Electrocautery	1

and 12 (6%) had had more than 7 sexual partners. The estimated mean number of partners was 2.4.

Information on previous STD was registered in 296 (98%) of the 301 patients. Two hundred and twenty-six patients (77%) had a previous diagnosis of an STD. Concomitant chlamydia was diagnosed in 7% and genital herpes in 1.5%. HIV status was noticed in 118 (39%) patients, of whom 9 (8%) were HIV antibody positive.

Treatment

Treatment modalities applied are shown in Table I. Twelve patients were not treated at all, mainly due to not attending scheduled treatment visits.

Number of treatments given and total numbers of visits

The number of treatments given is shown in Table II. Mean number of

Table II. Number of treatments given to 289 patients with genital warts

No. of treatments	No. of patients
1	96
2	61
3	35
4	16
5	16
6	14
7	6
8	9
> 9	36

treatments was 4. The total number of visits in the clinic in the examined 7-month period in 1998 was 9898. Of these, 1284 (13%) visits concerned treatment of patients with genital warts.

Duration of genital warts and overall cure rate

Visible condylomas disappeared in 181/289 (63%), whereas 120/289 (42%) had persistent lesions. Recurrent episodes of genital warts were common. The number of recurrences is shown in Table III.

Duration of condyloma acuminatum is shown in Table IV. Data is available for only 270 of the 301 patients, mainly due to non-compliance with control visits. Mean duration of warts was 18 months. Sixteen patients had warts for more than 5 years.

Discussion

A dramatic increase in the prevalence of genital warts has taken place in our STD clinic since 1995. Condyloma acuminatum is now the leading STD at the clinic. The public campaigns running from 1985-1995, which focused on the use of condoms in order to avoid transmission of HIV, had an impact on the prevalence of all STDs. The decrease prevalence observed in all STDs after the introduction of the HIV infection in Denmark in 1984-85 has been replaced by an increasing trend since

Table 3: Recurrent episodes of genital warts among 289 patients diagnosed in a 7-month period in 1998.

No. of recurrences	No. of patients
0	102 (35 %)
1	76 (26 %)
2	40 (14 %)
3	34 (12 %)
> 4	37 (13 %)

1995. Less effort has been made since 1995 to inform and educate the general public, which may be one important explanation for the increase in STDs, including condyloma acuminatum. The lack of efficient therapy for condylomas may be another important factor, which inevitably leads to accumulation of more chronic recalcitrant genital wart cases. This stresses the importance of a continuous awareness of the risk of contracting an STD when involved in sexual intercourse without use of a condom.

We find that our treatment strategy is acceptable as the genital warts

Table 4. Duration of genital warts in 270 consecutive patients seen during a 7-month period in 1998.

Duration of genital warts (months)	No. of patients
Less than 1	128 (47 %)
1-12	61 (23 %)
13-24	20 (7 %)
More than 24	61 (23 %)

disappeared in approximately 47% of the patients within one month and in further 23% within one year. One or two treatments, usually with podophyllin 20%, were needed in 157 (54%) of the 289 patients treated. Podophyllotoxin, recommended as first line treatment, was used in only 45 patients (15 %) (1). We have previously conducted a clinical trial comparing podophyllotoxin with podophyllin 20% and found the former to have no advantage (2). Freezing with liquid nitrogen or CO₂ laser were usually applied as second-

line options in those patients not responding to podophyllin/podophyllotoxin. Therapeutically the main problem is the rest of the patients – those with warts persisting for more than 2 years. These non-responding patients are clearly frustrated. As an increasing number of patients attend the clinic, the pool of therapy-resistant case is inevitably growing as well. More focus should be turned to these difficult-to-treat patients, as a significant part of the clinic's resources is assigned to this group.

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