

# A Clinical Study on Warts

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## ABSTRACT

**Context:** Verruca vulgaris is the commonest skin disease in the dermatology practice. The clinical management of Verruca vulgaris is often challenging. Multiple modalities of treatment currently exist, but none of them is singularly effective.

**Aim:** To study the case of warts clinically.

**Settings and Design:** This was an observational study which was done in the Department of Dermatology.

**Methods and Materials:** The study was carried out for 12 months and it included 90 patients. Patients with genital warts, immunocompromised patients and pregnant females were excluded from the study.

**Statistical Analysis :** The statistical analysis of the descriptive data, that included the number and percentages, was done for all the categories.

**Results:** There were 90 cases of warts and a majority of the patients (30) belonged to the age group of 11-20 yrs. 67 patients were males and 23 were females. A majority of the warts were seen in students (45). The most commonly involved site was the hand (34). The most common type of wart was the common wart (60).

**Conclusions:** Viral warts were common in the younger age groups. Males outnumbered the females. The hand was the commonest site which was involved. Common warts was the commonest type of warts.

**Key Words:** Warts

## INTRODUCTION

Warts are the commonest viral infections which are encountered in the dermatological practice, which are caused by DNA tumour viruses that belong to the family, Papova viridae [1]. Warts are benign epidermal proliferations that have been recognized for thousands of years [2]. Until the 19th century, genital warts were believed to be a form of syphilis or gonorrhoea [3]. The term, 'warts' was coined by Melnick in 1962 to denote a group of infections which were caused by DNA viruses that comprised the papilloma, polyoma, and the vacuolating viruses [3].

## MATERIALS AND METHODS

**Study design:** 90 consecutive patients with warts, who attended the Department of Dermatology were selected for the study.

**Inclusion criteria:** Patients who presented with all morphological types of warts.

**Exclusion criteria:** Patients with genital warts, immunocompromised patients and pregnant females were excluded from the study.

A detailed history regarding the age, sex, occupation, duration of the disease and family history of the patients was obtained. A dermatological examination was done, taking care to note the morphology and the distribution of the warts. All the cases were diagnosed by paring. A written consent was obtained from all the patients. A clearance from the ethical committee was also obtained.

The statistical analysis of the descriptive data that included the number and percentages was done for all the categories.

## RESULTS

In the present study, more number of patients i.e, 33.3% belonged to the age group of 11-20 yrs, as shown in [Table/Fig-1].

Among the 90 patients, there were 67 males and 23 females, as shown in [Table/Fig-2]. The male to female ratio was 6.7:2.3

Students constituted a majority of the patients, followed by housewives, as shown in [Table/Fig-3].

In the present study, there were more patients who were suffering from warts for between 1-3 months. The minimum duration which was observed was 01 month and the maximum duration which was observed was 07 years, as shown in [Table/Fig-4]. The most common type of wart was common warts, which was observed in 60 patients, which constituted 66.6% of the total cases. This was followed by plantar warts, as shown in [Table/Fig-5]. The most common site was the hand, as shown in [Table/Fig-6].

## DISCUSSION

### Age

In the present study, more number of patients (33.3%) belonged to the age group of 11-20 years, followed by 32.22% belonging to the age group of 21-30 years. Berth Jones and Hutchinson [4], in their study on 400 patients of warts, found 54% patients in the age group of 11-25 years. Chandrasekhar et al. [5], in their study on 144 patients of warts, found 41.9% patients in the age group of 10-14 years. Chaung et al. [6] mentioned a peak incidence between 12 and 16 years of age. Thus, in the present study, as in the studies which are mentioned above, warts were commonly seen in the younger age group, that too, more in the age group of 11-20 years, which was the school and college going age group. The chances of contact were more in this age group.

### Sex

In the present study, among the 90 patients, 67 were males and 23 were females, who constituted 74.44% and 25.55% of the cases

Age (years)	No. of Patient	Percentage
< 10	14	15.5%
11 – 20	30	33.3%
21 – 30	29	32.2%
31 – 40	09	10%
> 40	08	8.8%
TOTAL	90	

[Table/Fig-1]: Age Distribution

Sex	No. of Patients	Percentage
Male	67	74.44%
Female	23	25.55%

[Table/Fig-2]: Sex Distribution

Occupation	No. of Patients
Students	45
Servicemen	23
House Wife	15
Ex-Servicemen	07
TOTAL	90

[Table/Fig-3]: Occupation

Duration	No. of Cases
1 – 3 months	30
3 – 6 months	18
6 – 9 months	09
9 months – 01 year	04
1 – 2 year	14
2 – 3 year	08
3 – 4 year	04
4 – 5 year	02
5 – 6 year	–
7 – 9 year	01

[Table/Fig-4]: Duration of Warts

Type of Wart	No. of Patients	Percentage
Common wart	60	66.66%
Plantar wart	20	22.22%
Plane wart	07	7.77%
Filiform wart	03	3.33%

[Table/Fig-5]: Type of Wart

Sl. No.	Site	No. Of Patients
01.	Face	09
02.	Neck	06
03.	Trunk	01
04.	Arms	03
05.	Forearms	11
06.	Dorsum of hand	25
07.	Palms	09
08.	Periungual	01
09.	Thighs	01
10.	Legs	01
11.	Dorsum of feet	09
12.	Plantar surface	20
13.	Nose	01

[Table/Fig-6]: Site of Wart

respectively. Bourke et al. [7], in their study, had 225 patients of warts, which included 117 males and 108 females. In a study on warts in 100 patients, which was conducted by Dhar et al. [8], there were 56 males (56%) and 44 (44%) females. Chandrasekhar et al. [5], in their study, had 144 patients of warts, which included 97 males and 47 females, who contributed 67.36% and 32.64% of the cases respectively. Thus, in the present study, as in the studies which are mentioned above, warts were commonly seen in males. As compared to the above three studies, in the present study, the number of male patients was more. This could be attributed to the changing trend of a cosmetic interest in males, which contributed to their reporting for the treatment and also the above two studies date few years back. Another important factor that was observed during the study was that many of the males were students who could understand the infectivity of the disease.

### Occupation

In the present study, students constituted a majority [45 (50%)] of the patients, followed by servicemen [23(25.5%)]. Housewives constituted 16.6% (15) of the patients. Champion et al. [9] have mentioned that warts showed an increased incidence during the school years, which reached a peak between the age of 12 and 16 years. Chandrashekar Laxmisha et al. [5], in their study on 144 patients of warts, found that 43 cases (53%) were students. Thus, in the present study, as in the studies which are mentioned above, warts were commonly seen in students. The higher incidence among the students in the present study could be attributable to the fact that the disease was more common in the second and early third decades of life, wherein the chances of the exposure to the infection was high. As has been said earlier, it could also be due to the awareness about the infectivity in this group. Housewives probably get affected more frequently as compared to others, as the chances of trauma care are more in these people.

### Duration

The duration of warts is variable; a greater number of male patients attended the hospital at an early stage of the disease than the females. In the present series, 30 patients presented with 1–3 months of duration of the disease. The earliest presentation was at 1 month and the longest duration was 7 years. Chandrashekar Laxmisha et al. [5], in their study on 81 children of warts, found a duration of between 1-2 months in 29 cases (35.8%). In adults, the duration of the presentation was between 1-2 months in 25 cases (39.6%). Thus, the results of the present study were similar to those of the studies which are mentioned above. The shortest duration was 2 months, while the longest duration of 7 years was reported by Bushan Kumar et al. [10], which was more or less similar to that in the present study.

### Type of warts

In the present series, the most common type of warts were common warts (66.66%), as shown in [Table/Fig-7], followed by plantar warts (20.22%) as shown in [Table/Fig-8], plane warts (7.77%) and filiform warts (3.33%). Rook and Wilkinson [9] reported that 70% of their patients had common warts, 24% had plantar warts, 3.5% had plane warts and 2% had filiform warts at their hospital clinic in Cambridge. Chandrashekar et al. [5], in their study on 81 children of warts, found that 60 cases were common warts. In adults, 30 cases were common warts. Koning et al. [11], in their study, found that common warts were common. The findings of the present study were similar to those of the above studies.



[Table/Fig-7 & 8]: Verruca Vulgaris

### Site of involvement

The sites of involvement which were observed in the present series were the dorsum of the hands (25), the plantar surface (20), the dorsum of the feet (9), the forearm (11), the palms (9), the face (9), the neck (6), the legs (1), the thigh (1), the periungual sites (1) and the trunk (1). TSC Theng et al. [6], in their study on 302 patients of warts, found that most of the lesions were located on the hands (118), followed by lesions on the feet (116). Chandrashekar et al. [5], in their study on 144 patients, found that the commonest site of involvement in adults and children was the hands. The findings of the present study were similar to those of the above studies.

### CONCLUSION

Warts or verrucae are one of the commonest conditions in the dermatological practice. They are more common in the younger age group due to the increased chances of contact transmission. Overall, males outnumbered the females. A higher incidence among students clearly showed the anxiety of the students in getting rid of the same.

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