

## Warts – Spectra of Different Clinical Presentation

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**Abstract:** Warts are the most common presentation of all viral skin infections. Different morphological variants of warts viz; verruca vulgaris, verruca plana, digitate warts, plantar warts etc. do exists. A study was conducted at Muzaffarnagar Medical College to see the distribution of warts and its variants in this region.

**Introduction:** Warts or verrucae are benign cutaneous and mucosal epithelial proliferations caused by papilloma viruses. Persistent lesions caused by certain types of human papilloma virus can undergo neoplastic transformation. Papilloma viruses comprise a large family of small DNA viruses that infect humans and many other species<sup>1</sup>

HPV infection is very common and patients present with different morphologies of warts in dermatology OPD.

**Key Words:** verrucae, Human Papilloma Virus

### I. Materials & Methods

384 patients with warts, who attended the Dermatology OPD at Muzaffarnagar Medical College during Nov.2011 to Oct 2013 were selected for the study after getting ethical clearance. It was an observational study & the results presented in simple statistical tables.

**Inclusion Criteria :-** Patients with all morphological types of warts and of all ages were included.

**Exclusion criteria :-** Pregnant females and immuno compromised patients were excluded from the study.

A detailed personal and family history of patients was taken. Clinical examination was done and morphology & distribution of warts were noted., apart from history and examination. A detailed history of similar lesions in the partners, of patients of genital warts was taken. Their extramarital and HIV status were also screened. Diagnosis was mainly made clinically, by paring in planter warts and histopathology was done in doubtful cases. Clinical and histological photographs were taken.

### II. Results and Observation

- Out of 384 patients, 216 were females and 168 were males. The male to female ratio was 1:1.3

Age of patients ranged from 03 to 70 years. Most common age of presentation was between 2<sup>nd</sup> & 3<sup>rd</sup> decade. Duration of the disease was from less than months to more than three years.

Verruca vulgaris was common in males but plane warts were most common in females. The most common site for verruca vulgaris was dorsum of hands and for plane warts, face was the commonest site.

Many members from one family were affected with the disease. Facial plane warts were more common in young females residing in overcrowded area. Students and barbers presented mostly with verruca vulgaris.

**Table 1. Age distribution of warts.**

| Age Group {Year} | No. of Patients | Percentage |
|------------------|-----------------|------------|
| < 10 Years       | 71              | 18.49%     |
| 11-20            | 96              | 25.00%     |
| 21-30            | 89              | 23.18%     |
| 31-40            | 76              | 19.79%     |
| >40 Years        | 52              | 13.54%     |

**Table 2. Sex Distribution**

| Sex    | No. of Patients | Percentage |
|--------|-----------------|------------|
| Male   | 168             | 43.75%     |
| Female | 216             | 56.25%     |

**Table 3. Type of warts**

| Type            | No. of Patients | Percentage |
|-----------------|-----------------|------------|
| Common warts    | 148             | 38.54%     |
| Plane warts     | 154             | 40.10%     |
| Plantar Warts   | 46              | 11.99%     |
| Filliform warts | 24              | 06.25%     |
| Genital Warts   | 12              | 03.12%     |

**Table 4. Site of warts**

| S.No. | Site                      | No. of Patients |
|-------|---------------------------|-----------------|
| 1.    | Head & Neck               | 112             |
| 2.    | Trunk                     | 12              |
| 3.    | Upper limbs               | 54              |
| 4.    | Dorsum of hands           | 86              |
| 5.    | Palms                     | 7               |
| 6.    | Periungual + interdigital | 16              |
| 7.    | Lower limbs               | 30              |
| 8.    | Dorsum of feet            | 9               |
| 9.    | Plantar Surface           | 46              |
| 10.   | Genitalia                 | 12              |

### III. Discussion

Data collected of these two years clearly show that there is female preponderance in this region. Out of 384 patients 216(56.25) were female and 168 (43.75%) were males. This is in contrast with other studies like Chandrashekhar' etal<sup>2</sup> Sudhakar et al<sup>3</sup> in which male predominance is found. Female predominance in our study could be due to awareness about unsightly lesions on their face.

Peak age of presentation in our study is between 2<sup>nd</sup> and 3<sup>rd</sup> decade of life accounting 48.18%, which correlated well with other studies Chandrashekhar et al in their study on 144 patients of warts found 41.9% patients in the age group of 10-14 years. Berth Jones and Hutchinson<sup>4</sup> in their study on 400 patients of warts found 54% patients in the age group of 11-25 years.

According to Kilkenny M et al<sup>5</sup> nongenital warts occur most frequently in children & young adults in whom the incidence may exceed 10%. In our study incidence in first decade is 18.49% & in 2<sup>nd</sup> decade is 25% which has got good correlation with the above study.

Incidence declines with the age of the patients going above 5<sup>th</sup> decade.

In the present study most common type of wart was plane wart. Face was the most common site in females. Second most common wart was verruca vulgaris. followed by plantar warts. Verruca vulgaris was most commonly present over dorsum of hands. These data are little different from other studies viz in a study of 1000 children under 16 with warts referred to hospital clinics in Cambridge UK in the 1950s 70% had common warts, 24% had plantar warts, 3.5% had plane warts and 2.0% had filiform warts. 0.5% accounted for anogenital warts<sup>6</sup>. Konig et al<sup>7</sup> also found verruca vulgaris more common in their study.

We found 12 cases (3.12%) of genital warts, a sexually transmitted infection Which were included after getting negative screening tests for other STDS & HIV .None of the sex partners had genital warts. This study resembles more or less with the study conducted at JIPMER Pondicherry<sup>2</sup> in which amongst 144 cases of viral warts attending OPD between September 2000 to June 2002 genital warts was observed in 15 cases all of whom were adults & four of them were HIV seropositive.

The duration of the disease was between less than a month to more than three years.

Most of the patients of verruca vulgaris were students and barber. Plane warts were more common in females. Many members of a single family were affected. It could be explained by over exposure and over crowding and large families<sup>8</sup>.

### IV. Conclusion

Warts are commonest presentation of all viral skin infections involving any cutaneous and mucosal site. Warts are more common in younger population with some regional variation as seen in the present study. Histopathological review is necessary in long standing genital warts to exclude malignant changes and their timely management. In spite of having self regressing property they can cause unsightly appearance of face & nail loss in digital warts if left untreated.

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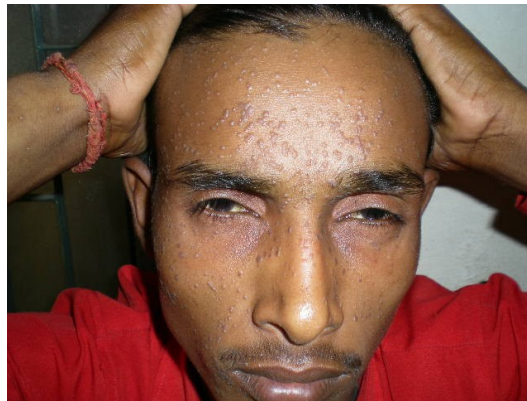


IMAGE 1-Plane warts



IMAGE 2 - Verruca vulgaris

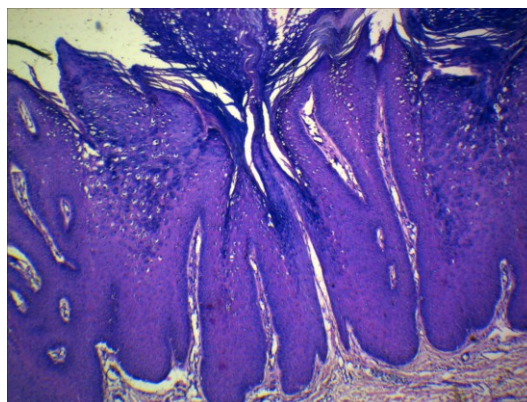


Image3- Histopathological slide verruca vulgaris H & E x40