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## A retrospective study of clinico-epidemiological profile of wart patients

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### Abstract

**Background:** Warts are a benign proliferation of the skin resulting from infection with human papilloma viruses.

**Aim and objective:** To study clinic-epidemiological profile of patients presented with warts.

**Materials and Methods:** Data of 100 patients with warts were studied retrospectively who were attending the outpatient Sharma Hospital, Gwalior from August 2017 to February 2018. Warts were broadly classified as genital and nongenital warts, than further subdivided in to common, plane, palmoplantar, mosaic, and digitate/filiform.

**Results:** Maximum patients had nongenital warts (88%) followed by genital (12%). All the genital warts were acuminate. Maximum patients were males with mean age of  $22.24 \pm 12.4$  years. Majority of the mosaic warts (92.3%) patients were women and all were housewives. Maximum subjects were student (38%) of that 14 (36.84%) had common warts. Out of 25% laborers maximum had (44%) palmoplantar wart. Cosmetic concern (94%) was the most common complain followed by pain (21%). Limbs were the most commonly site affected (63.3%).

**Conclusions:** Common, palmoplantar, and plane were the most common warts which belong to the common types of nongenital warts. Warts were mostly seen in second decade of life. Extremities were the most common site for warts.

**Keywords:** Nongenital warts, palmoplantar wart, pain, extremite

### Introduction

A wart is small rough and hard growth that is similar in color to the rest of the skin <sup>[1]</sup>. Usually warts do not present with any symptoms until they are situated at the bottom of the feet and may have pain induced by pressure <sup>[2]</sup>.

Warts represent the third most common skin related disease affecting 2-20% of the primary school children. Prevalence of warts is also higher among the adults population <sup>[3-5]</sup>.

Present study we tried to assessed the clinic-epidemiological aspects of different types of warts as data is limited in Indian population.

### Materials and Methods

A retrospective study was performed on 100 patients clinically diagnosed with warts who were attending the outpatient Sharma Hospital, Gwalior from August 2017 to February 2018. Data of 100 patients were searched for detailed history and complete cutaneous and systemic examinations and recorded in an excel sheet. All the details were entered by a single person in the excel sheet.

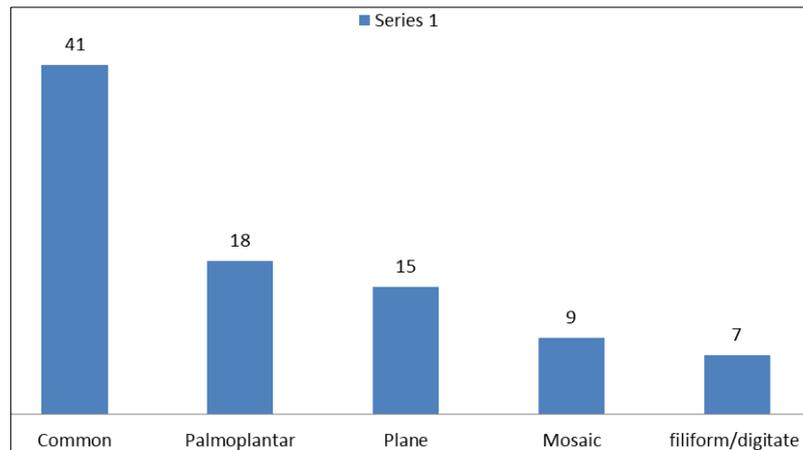
During data analysis all the 100 subjects were grouped into genital and nongenital warts and depending on the morphology further sub grouping was done as namely, common, plane, palmoplantar (<1 cm confined to the palms/soles), mosaic (multiple small papular warts coalesced into plaques  $\geq 1$  cm), and filiform/digitate warts. Findings were tabulated and their proportions and percentages were noted.

All the data analysis was performed using IBM SPSS ver. 20 software. Categorical data was expressed as percentage. Cross tabulation and frequency distribution was used to prepare the table and Microsoft excel 2010 was used to prepare the required graph. Level of significance was assessed at 5% level.

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## Results

In present study maximum patients had 88% had nongenital warts followed by 12% patients who had genital warts. All the genital warts were acuminate.



**Graph 1:** Clinical types of warts

Mean age in present study was  $22.24 \pm 12.4$  years which ranged from 12 to 55 years. Male (87%) outnumbered female (13%) in present study. Maximum patients of warts except those of the mosaic were male. Maximum cases of mosaic warts [12 (92.3%)] were women and all were housewives.

Maximum patients were student (38%). Of that 14 (36.84%) had common warts and 12 (31.57%) had plane warts. Laborers (25%) were the second most common occupation in present study. Of that, 11 (44%) were of palmoplantar, 4 (16%) were of digitate and 6 (24%) cases were of genital warts. In present study there were 18% housewives, out of that 8 (44.4%) were of mosaic.

Maximum patients in present study had complaint of cosmetic concern (94%) followed by pain (21%). Pain was associated with all cases of genital wart. Among non-genital warts, maximum patients of palmoplantar ( $n=18$ ) warts had pain 15 (83.3%).

Upper limbs including palms [31 (34.4%)] followed by lower limb including soles [26 (28.9%)] were the most common site of warts.

## Discussion

The ratio of nongenital: genital in present study was 7.3:1. Prevalence of non-genital wart was highest in present study, among them common, palmoplantar, plane, mosaic and filiform were the most common type. All the genital cases were acuminate. Maximum patients belong to second decade of life. In a similar study done by Berth-Jones *et al.* [6] who enrolled 400 cases, of that more than half of the patients (54%) belong to age group of 11-25 years. Increased prevalence of warts among young population especially common and plantar warts could be due to increased propensity to trauma facilitated- inoculation as well as decreased immunity.

In present study males were mostly affected it may be due to higher outdoor activities done by males and increasing trend of cosmetic concern. Among the female housewives mosaic wart was the most common.

As per the occupation is concerned, students were maximum. In a study done by Campion, also reported increase in warts during the school days, mainly students

who were in the age group of 12-16 years [7]. The higher incidence may be due to increased susceptibility during their games/other physical activities.

Laborers were the second most common occupation in present study; most of them had higher incidence of palmoplantar wart, may be due to increased chances of trauma. Laborers have disproportionate incidence of genital in present study. Out of 18% housewives, mosaic and palmoplantar warts were the most common one. Housewives are having higher propensity to sustain minor cuts and cracking of soles while walking barefoot could explain the common occurrence of mosaic and palmoplantar warts in present study.

In present study maximum patients had the cosmetic concern; this is expressed universally by the patients with genital, mosaic, filiform, and plane warts and by vast majority of those with common and palmoplantar warts. Most of the patients with palmoplantar warts complained about pain it may be due to increased likelihood of trauma especially in view of the practice of walking barefoot by many among our study population [8].

Limbs were the most common site affected by warts in present study. Study done by Theng *et al.* [9] reported that in 39% of the subjects had hands and 38% had feet involvement. Face was the second most common site, which may be due to increased cosmetic procedures like waxing, threading, facials, shaving, and so forth, in the saloons.

Small sample size and lack of statistical analysis were the main drawback of present study. There is a need of a large randomized clinical trial to strengthen the present study results.

## Conclusion

Present study revealed that common, palmoplantar, and plane warts were the most common warts. Prevalence was maximum in the patients belong to second decade of life followed by first decade. Extremities were the most common site of warts followed by face.

## Reference

1. Loo SK, Tang WY. Warts (non-genital). BMJ clinical evidence, 2014, 1-6.

2. De Villiers EM, Fauquet C, Broker TR, Bernard HU, zur Hausen H. Classification of papillomaviruses. *Virology*. 2004; 324(1):17-27.
3. Kasim K, Amer S, Mosaad M, Abdel-Wahed A, Allam H. Some epidemiologic aspects of common warts in rural primary school children. *ISRN Epidemiology*, 2013, 1-6. Article ID 283591.
4. Lutzner MA. The human papillomaviruses, a review. *Archives of Dermatology*. 1983; 119(8):631-5.
5. Criton S. Viral infections. in *IADVL Textbook of Dermatology* RG, Valia AR. Valia, Eds., Bhalani Publishing House, Mumbai, India, 3rd edition, 2008, 331-396.
6. Berth-Jones J, Hutchinson PE. Modern treatment of warts: cure rates at 3 and 6 months. *British Journal of Dermatology*. 1992; 127(3):262-5.
7. Champion MJ. Clinical manifestations and natural history of genital human papillomavirus infection. *Obstetrics and Gynecology Clinics of North America*. 1987; 14(2):363-88.
8. Laxmisha C, Thappa D, Telansari J. Viral warts-a clinic epidemiological study. *Indian Dermatology*. 2003; 48(3):142-5.
9. Theng TSC, Goh BK, Chong WS, Chan YC, Giam YC. Viral warts in children seen at a tertiary referral centre. *Annals of the Academy of Medicine Singapore*. 2004; 33(1):53-6.