

## Clinical Assessment of Common Warts: An Institutional Based Study

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### ABSTRACT

**Background:** Common warts are one of the routinely encountered clinical lesions in general population. One of the causative agents in the causation of common warts is the human papilloma virus. Hence; we aimed to assess the clinical and demographic profile of common warts.

**Materials & Methods:** The present study included assessment of clinical and demographic profile of patients affected with common warts. Complete demographic and clinical details of all the subjects were recorded. All the patients underwent thorough examination and recording of complete medical and family history of all the subjects was noted. For observing any associated secondary changes, complete physical examination of the patients was carried out. All the data were entered in excel sheet, compiled and analysed by SPSS software.

**Results:** In the present study, we assessed a total of 20 subjects. Majority of the subjects has one to three warts per person. As far as location of the warts is concerned, most of them were located on the fingers. In 4 and 2 subject, the warts were present on the face and scalp respectively. In one subject each, wart was present on arm, feet and legs respectively. Pain was seen in twenty percent of the subjects while one subject each exhibited hyperhidrosis and pus discharge.

**Conclusion:** Common warts are most commonly encountered in young patients.

**KEYWORDS:** Clinical, Pain, Warts.

### INTRODUCTION

History of common warts dates long backs Greek and Roman times and since then, has been a frustration for both patients and clinicians. They can greatly affect a patient's quality of life by causing embarrassment, fear of negative appraisal by others and frustration caused by persistence and/or recurrence.<sup>1-3</sup> Human papilloma viruses (HPVs) are the causative agents of a variety of benign and cancerous lesions of the skin and other epithelial surfaces. Over 18 HPV genotypes have been described. Risk factors include use of communal showers, occupational handling of meat, and immunosuppression.<sup>4,5</sup> In immunocompetent people, warts are harmless and resolve as a result of natural immunity within months or years.<sup>6</sup> Hence; we planned the present study to assess the clinical profile of common warts.

### MATERIALS & METHODS

The present study was conducted in the Department of Skin & VD, Lord Buddha Koshi Medical College and Hospital, Saharsa, Bihar (India) for the period of one

month and included assessment of clinical and demographic profile of patients affected with common warts. Ethical approval was taken from institutional ethical committee and written consent was obtained from all the subjects after explaining in detail the entire research protocol. Inclusion criteria for the present study included: Patients within the age group of 20 years to 60 years, Patients with negative history of any other systemic illness and Patients with negative history of any known drug allergy. Complete demographic and clinical details of all the subjects were recorded. All the patients underwent thorough examination and recording of complete medical and family history of all the subjects was noted. For observing any associated secondary changes, complete physical examination of the patients was carried out. Recording of following parameters was done:

- Site of lesion,
- Extent of lesion,
- Duration of lesion,
- Progression of lesion

All the data were entered in excel sheet, compiled and analysed by SPSS software. Uni-variate regression curve were used for assessment of level of significance. P-value of less than 0.05 was taken as significant.

**RESULTS**

A total of 20 subjects were included in the present study (Table 1).

Among them, 12 subjects belonged to the age group of 20 to 30 years. 20 and 15 percent of the subjects belonged to the age group of 31 to 40 years and 41 to 50 years respectively (Graph 1).

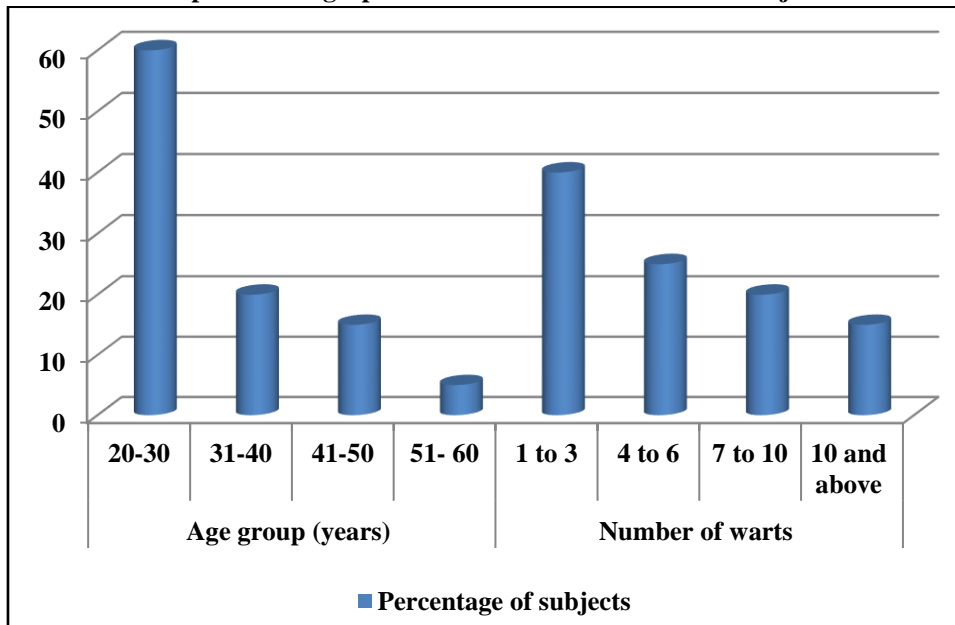
Majority of the subjects (40 %) has one to three warts per person. 25 percent of the subjects had 4 to warts per person. Only 3 subjects had ten or more warts per person. As far as location of the warts is concerned, most of them were located on the fingers (Table 2).

In 4 and 2 subject, the warts were present on the face and scalp respectively. In one subject each, wart was present on arm, feet and legs respectively. Pain was seen in twenty percent of the subjects while one subject each exhibited hyperhidrosis and pus discharge (Graph 2). Pruritus was seen in 2 subjects while only one patient showed associated bleeding.

**Table 1: Demographic and clinical details of all the subjects**

Parameter	Number of subjects	
Age group (years)	20-30	12
	31-40	4
	41-50	3
	51- 60	1
Number of warts	1 to 3	8
	4 to 6	5
	7 to 10	4
	10 and above	3

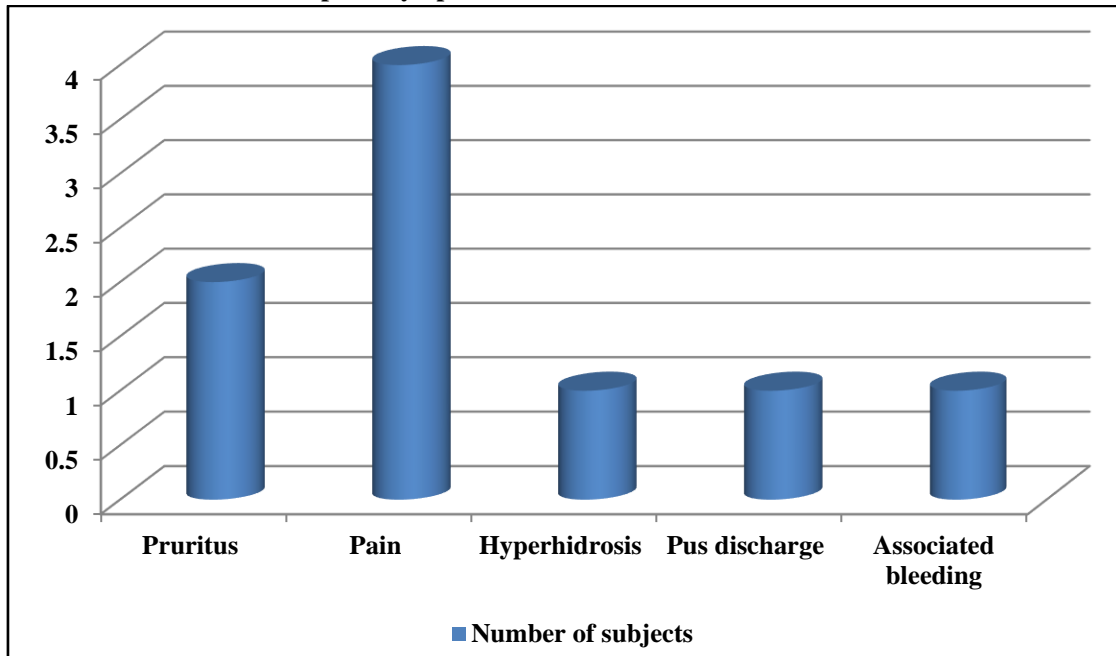
**Graph 1: Demographic and clinical details of all the subjects**



**Table 2: Location of the warts**

Site of onset of wart	Number of subjects
Face	4
Neck	4
Fingers	7
Scalp	2
Arms	1
Feet	1
Legs	1
Total	20

Graph 2: Symptoms associated with common warts



## DISCUSSION

Human papilloma virus (HPV) is one of the common causes for the warts and most people will experience with this infection at some point in their life.<sup>7</sup> While common warts can affect patients' quality of life by causing adverse psychological effects or negative social perception, certain types of HPV may induce life-threatening malignancies. HPV is associated with virtually 100% of cervical cancers, and a high portion of cancers of the penis and anus.<sup>8-10</sup> HPV 16 has also been strongly associated with various head and neck cancers, including head and neck squamous cell carcinoma and oropharyngeal carcinoma of the tonsils.<sup>11</sup> Hence; we planned the present study to assess the clinical profile of common warts.

In the present study, we observed that fingers were the most common site for occurrence of common warts with pain as the most common presenting symptom, if present (Table 2, Graph 2). Cockayne S et al compared the clinical effectiveness of cryotherapy versus salicylic acid for the treatment of plantar warts. 240 patients aged 12 years and over, with a plantar wart that in the opinion of the healthcare professional was suitable for treatment with both cryotherapy and salicylic acid. Cryotherapy with liquid nitrogen delivered by a healthcare professional, up to four treatments two to three weeks apart. Complete clearance of all plantar warts at 12 weeks. Secondary outcomes were (a) complete clearance of all plantar warts at 12 weeks controlling for age, whether the wart had been treated previously, and type of wart, (b) patient self-reported clearance of plantar warts at six months, (c) time to clearance of plantar wart, (d) number of plantar warts at 12 weeks, and (e) patient satisfaction with the treatment. There was no evidence of a difference between the salicylic acid and cryotherapy

groups in the proportions of participants with complete clearance of all plantar warts at 12 weeks (17/119 (14%) v 15/110 (14%), difference 0.65%. The results did not change when the analysis was repeated but with adjustment for age, whether the wart had been treated previously, and type of plantar wart or for patients' preferences at baseline. There was no evidence of a difference between the salicylic acid and cryotherapy groups in self-reported clearance of plantar warts at six months, difference -3.15% or in time to clearance. There was also no evidence of a difference in the number of plantar warts at 12 weeks. Salicylic acid and the cryotherapy were equally effective for clearance of plantar warts.<sup>12</sup>

Wenner R et al evaluated the efficacy of duct tape occlusion therapy for the treatment of common warts in adults. A total of 90 immunocompetent adult volunteers with at least 1 wart measuring 2 to 15 mm were enrolled between October 1, 2004, and July 31, 2005. Eighty patients completed the study. Patients were randomized by a computer-generated code to receive pads consisting of either moleskin with transparent duct tape (treatment group) or moleskin alone (control group). Patients were instructed to wear the pads for 7 consecutive days and leave the pad off on the seventh evening. This process was repeated for 2 months or until the wart resolved, whichever occurred first. Follow-up visits occurred at 1 and 2 months. Complete resolution of the target wart. Secondary outcomes included change in size of the target wart and recurrence rates at 6 months for warts with complete resolution. There were no statistically significant differences in the proportions of patients with resolution of the target wart (8 [21%] of 39 patients in the treatment group vs 9 [22%] of 41 in the control

group). Of patients with complete resolution, 6 (75%) in the treatment group and 3 (33%) in the control group had recurrence of the target wart by the sixth month. They found no statistically significant difference between duct tape and moleskin for the treatment of warts in an adult population.<sup>13</sup> Mitsuishi T et al investigated 55 patients with multiple viral warts treated only with oral cimetidine for up to 4 months to examine the efficacy of treatment. The patients were divided into two groups: group A received oral cimetidine (<20 mg/kg/day) and group B received the drug (30 to 40 mg/kg/day). In addition, using real time PCR, we measured mRNA levels of the cytokines interleukin-2 (IL-2), IL-18, and interferon (IFN)-gamma taken from selected punch biopsy specimens before and during treatment. As a result, 34.5% (19/55) of the patients had a dramatic clinical improvement or complete remission (CR) of their viral warts and 23.6% (13/55) of the patients had partial responses (PR) within 4 months of cimetidine therapy. IL-2 and IFN-gamma mRNA levels were significantly increased and IL-18 mRNA levels were decreased in tissues of effectively treated viral warts. Our results show that the higher dose of oral cimetidine was more effective in treating multiple viral warts, that cimetidine activated Th1 cells to produce IL-2 and IFN- $\gamma$  and that their expression correlates with wart remission. These results suggested that cimetidine is an effective treatment for viral warts. In addition, based on the decrease in IL-18 mRNA elicited by the drug, IL-18 might be expressed by keratinocytes infected with HPV.<sup>14</sup>

## CONCLUSION

From the above results, the authors conclude that common warts are most commonly encountered in young patients. Since, they create considerable amount of cosmetic problems, proper treatment protocol should be followed keeping in mind the aesthetics of the patients.

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