

The frequency of warts among patients attending at department of dermatology and venereology, in Al-Sadar Hospital in Baghdad, IRAQ

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World Journal of Biology Pharmacy and Health Sciences, 2023, 14(01), 256–260

Publication history: Received on 03 March 2023; revised on 23 April 2023; accepted on 26 April 2023

Article DOI: <https://doi.org/10.30574/wjbphs.2023.14.1.0165>

Abstract

Background: Human papilloma virus [HPV] infection is a very common dermatological disease, as most people will experience infection during their lifetime.

Objective: To find the frequency of warts among patients attending at Department of Dermatology and Venereology, in Al-Sadar Hospital in Baghdad. IRAQ.

Patients and Methods: A descriptive cross sectional study was conducted during the period from the first of January to 31 of March 2021. This study included 7453 patients.

Results: the percentage of patients with warts was 1171[15.71%] with the higher number and percentage in females 622 [53.12 %] than in males 549[46.88 %]. The differences among age groups were significant (P=0.03). Also the differences due to month were significant.

Conclusions: There was high frequency of viral warts among patients attending at Department of Dermatology and Venereology at Al-Sadar Hospital especially at the children and young adult age groups.

Keywords: Human papilloma virus; Frequency of warts; Infection rate

1. Introduction

Viral warts are common dermatological disease caused by HPV. ^[1] Most people will experience infection during their lifetime.^[2] HPV causes a spectrum of cutaneous warts such as verruca vulgaris,verruca plana, palmoplantar warts and anogenital wart ;and it is usually takes a long time even years to heal, still some patients might not show spontaneous healing with long term follow up. ^[1]

The clinical appearance and history lead to the diagnosis of viral wart ^[3], rarely we need application of 3-5% acetic acid (acidwhiting) to genital warts enhances detection of these lesions particularly with colposcopic magnification.^[4] No treatment modality is uniformly effective for all cases of viral warts or directly antiviral. ^[1] The other fact that whatever method is used there will be failures and recurrences ^[4]; choice of treatment depends on location, size, number and types of warts as well as the age, cooperation of patient, pain inconvenience, duration, cost, cosmetic sequelae and risk of scarring.^[1]

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The study was done in Al-Sadar Hospital, because there was no similar previous study conducted in spite of its large geographical area and high population

2. Material and methods

At the beginning, a pilot study was done on a sample of 30 patients selected none randomly. A primitive questionnaire was done on it and adjustments were made for the best acceptable form. The pilot study was neglected.

A descriptive cross sectional study was conducted during the period from the first of January to 31 of March 2021. Convenient sample were used in this study, the total number of patients attending at Department of Dermatology and Venereology , Al-Sadar Hospital in Baghdad was 7453, 1171 patients of them had warts.

A verbal consent was taken with reassurance that the information gained will be kept confidential and not be used for other than the research objective.

Questionnaire was taken for each patient regarding age, sex, address, also family history, duration of warts, associated illness, any previous and recent treatment used for warts.

The patients were examined fully to determine the clinical type of the warts, their sites, size and number .The presence of previous BCG scar was examined .

In all patients, the diagnosis was made by history and clinical examination done by specialist and researcher. All patients with warts were included in the study .The researcher was qualified to diagnose wart disease as he had enrolled in a clinical training in the Department of Dermatology and Venereology in Baghdad Teaching Hospital .

Statistical analysis done by scientific calculator. Analytic statistics done by Microsoft office Excel 2007 and EPI-info. version 6. Chi-square, P value less than 0.05 was considered to be statistically significant.

3. Results

. The percentage of patients with warts was 15.71%(1171/7453) during the period between the first of January to the thirty first of March 2021, as in table [1].

Table 1 The percentage of warts

Total No	numbers of patients of warts disease	numbers of all the patients	percentage
7453	1171	6282	15.71%

It was found that percentage of females 622 [53.12 %] was significantly (P=0.03) higher than males 549[46.88 %](Table 2). The percentage of warts according to month showed significant differences (P<0.0001) as it was higher in January (18.59%) and March (17.57%) as compared with February (11.50) (Table 3).

Table 2 The percentage of warts according to gender

	numbers of patients of warts disease	numbers of all the patients	percentage	P-value
Male	549	46.88	46.88%	<0.0001
Female	622	53.12	53.12%	

Table 3 The percentage of warts according to the months

	Numbers of patients of warts disease	Numbers of all the patients	Percentage	P-value
January	474	2549	18.59%	<0.0001
February	312	2713	11.50%	
March	385	2191	17.57%	

In regards with age group, results revealed significant differences ($P < 0.0001$) as the highest percentages were shown in <6 years (18.18%), and 6-11 years (18.01%) whereas the lowest in 24-29 years (10.07) and 30-35 years (11.10%)(Table 4).

Table 4 The percentage of warts according to age

Age/Year	Numbers of patients of warts disease	percentage	P-value
<6	213	18.18%	<0.0001
6-11	211	18.01%	
12-17	161	13.75%	
18-23	194	16.56%	
24-29	118	10.07%	
30-35	130	11.10%	
> 35	144	12.30%	

Marital status factor show: the number and percentage of single patients was 695[59.35%], the number and percentage of married patients 437[37.32%] & the number and percentage of widows patients 39[3.33%], as shown in table [5].

Table 5 The distribution of study sample according to Marital status, BCG vaccination ,Medical & Family history

variables	Number	Percentage	P-value
Marital status			
Single	695	59.35	<0.0001
Married	437	37.32	
Widow	39	3.33	
BCG vaccination			
Positive	822	70.196	<0.0001
Negative	349	29.804	
Family History			
Positive	732	62.51	<0.0001
Negative	439	37.49	
Medical History			
Positive	314	26.69	<0.0001
Negative	857	73.31	
Previous therapy			
Positive	326	27.84	<0.0001
Negative	845	72.16	

Regarding the BCG vaccination, family history, medical history & previous therapy show that there is a high number and percentage of patients with scar of past BCG vaccination positive patients 822[70.196%] and there is a high number and percentage of patients with family history of warts 732 [62.51%] patients, there is a high a high number and percentage of patients with negative medical history 857[73.31%] patients & there is a high number and percentage of patients with no previous warts therapy 845 [72.16%] patients with significant differences ($P<0.0001$)(Table 5).

4. Discussion

The percentage of viral warts was 15.71% (Table 1) which is higher than that of Beliaeva^[5] 12.9 % in Russia, Paek et al^[6] 12.2% in Mexico, Shah et al^[7] 8% in USA, in UK the prevalence of viral warts was 5%^[2]. This difference may be due to many factors :AL- Sader city have high percentage of population /area, poverty and low education level .

The higher percentage of females (53.12% female versus 46.88% male) , which is agreed with studies of Wenk et al^[8]in Switzerland,Tamer et al^[9] in Turkey and Orozco-Topete et al^[10] in Mexico and disagreed with other studies ^[11, 12, 13].

Regarding patients with positive family history of warts was 62.5% and negative history was37.49% ,which is similar to the result of Van Haalen et al ^[11] in Netherlands, that is due to the contagious nature of the disease so in highly populated house the percentage increase.

Concerning to the BCG vaccination, the results: 70% of patients were positive with scar of past BCG vaccination and 30% of patients was negative which is similar to the result obtained by Rady ^[14] in Iraq, that is may be due the high number and percentage of patient in age groups (below 6 years-23years) in this study, and BCG vaccination is included in the Iraqi program of vaccination and most of children had the vaccine in the first week of life.

5. Conclusion

There was high frequency of viral warts among patients attending at Department of Dermatology and Venereology at Al-Sadar Hospital especially at the children and young adult age groups

Compliance with ethical standards

Acknowledgments

The authors like to thank the Al-Sadar Hospital for their cooperation.

Disclosure of conflict of interest

The authors declare no conflict of interest.

Statement of ethical approval

Ethical approval for this study was done.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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