

# SERUM ZINC LEVEL IN VERRUCAE VULGARIS PATIENTS AND EFFECT OF INTRALESIONAL INJECTION OF 2% ZINC SULFATE SOLUTION

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## Introduction

Verrucae are benign growths that develop on the skin as well as the mucous membranes as a result of human papillomavirus (HPV) infection. Zinc plays a crucial role in various physiological processes. Adequate zinc levels contribute to the integrity of tissue barriers, providing protection against pathogens.

## Aim of the work

The aim of this study was to assess the clinical efficacy and safety of intralesional 2% zinc sulfate solution in the treatment of verrucae vulgaris, evaluation of serum zinc concentration in verrucae vulgaris patients and correlating serum zinc level to susceptibility to get the infection

## Patients

The work protocol was as follow : the patients were recruited from the Dermatology Outpatient Clinic of the Alexandria Main University Hospital. The study was conducted on 70 patients with single or multiple common warts and 35 healthy controls without warts for evaluation of serum zinc level .

## Methods

70 patients with common warts , 35 patients in each group. Group A received intralesional 2% zinc sulfate solution while group B received intralesional distilled water and the control group which include 35 healthy volunteers without warts for assessment of serum zinc.

## Results

Group A treated with intralesional zinc sulfate showed marked improvement compared to group B treated with intralesional distilled water .

Table (1): Comparison between group A and group B according to response to treatment at the end of the study

	Group A (n = 35)		Group B (n = 35)		$\chi^2$	p
	No.	%	No.	%		
Response						
Poor response	9	25.7	28	80.0	29.331*	<0.001*
Partial response	4	11.4	6	17.1		
Complete response	22	62.9	1	2.9		

$\chi^2$ : Chi square test

p: p value for comparing between the two studied groups

\*: Statistically significant at  $p \leq 0.05$

Group A: Patients treated with intra lesional 2% zinc sulfate dissolved in distilled water

Group B: Patients will be treated with intra lesional distilled water

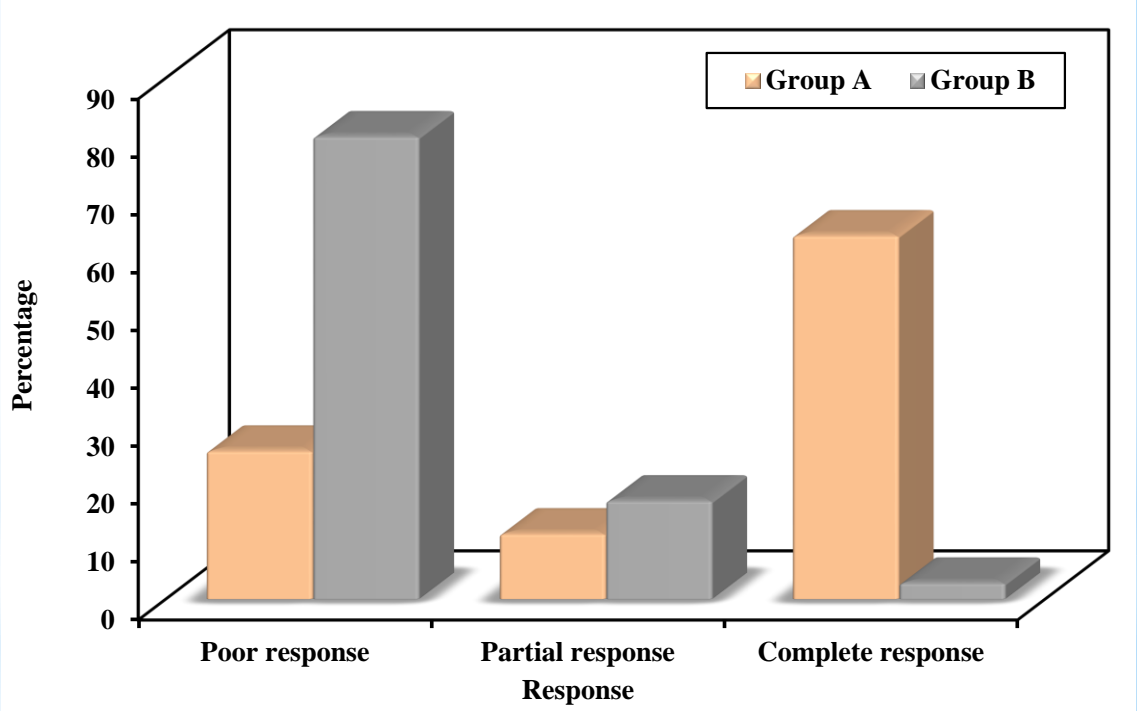


Fig (1): Comparison between group A and group B according to response to treatment at the end of the study

## Conclusion

Intralesional 2% zinc sulfate may be an effective treatment modality for common warts.