

# STUDY OF IL-22 EXPRESSION IN THE SKIN OF PEMPHIGUS VULGARIS PATIENTS

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## Introduction

Pemphigus encompasses a group of life-threatening autoimmune bullous diseases characterized by flaccid blisters and erosions of the mucous membranes and/or skin. The autoimmune reaction is driven by autoreactive T lymphocytes and B lymphocytes and their related cytokines such as IL-17, IL-21, IL-22, and IL-23.

## Aim of the work

The aim of this study was to detect IL-22 expression in the skin of pemphigus vulgaris patients.

## Patients

This study was conducted on Thirty pemphigus vulgaris (PV) patients who were diagnosed as pemphigus vulgaris clinically and confirmed histopathologically, compared to Fifteen tissue specimens of pathologically unremarkable skin findings from the safety margin of basal and squamous cell carcinomas as control group.

## Methods

Two Skin biopsies were taken under local anesthesia from all participants. One to be stained with hematoxylin & eosin (H&E) and the other section was stained immunohistochemically for IL-22.

## Results

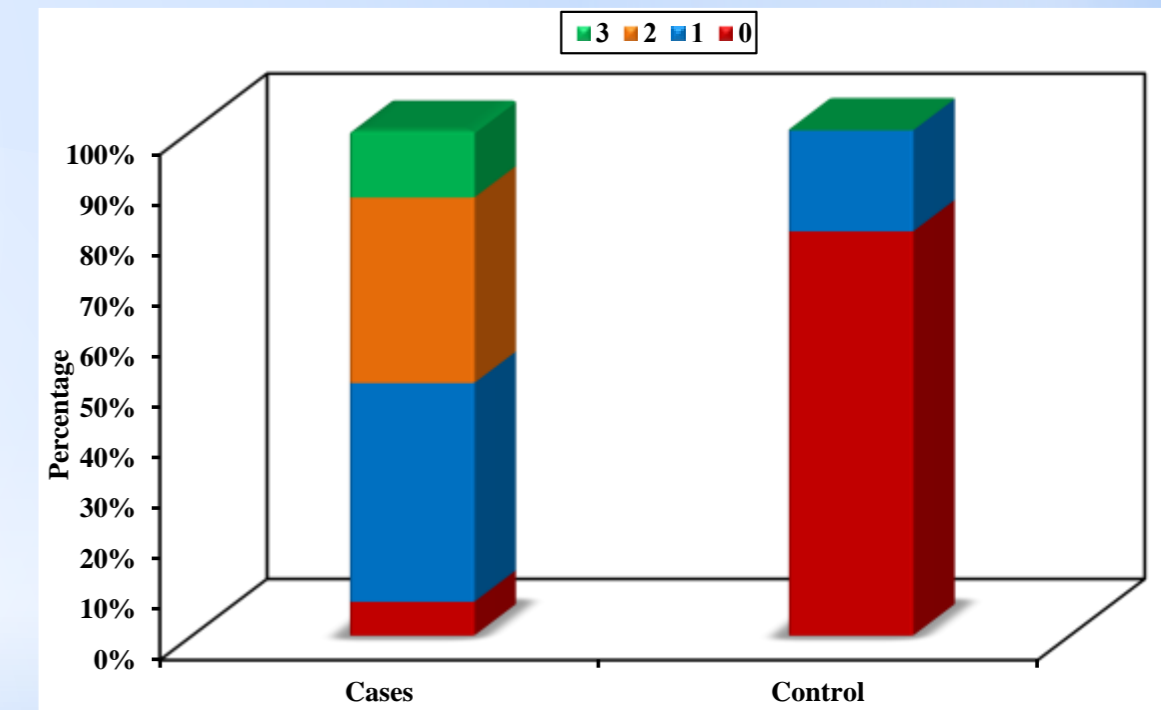
Percentage score was applied on the positively stained tissue section in both cases and control, with statistical significant differences between cases and control ( $P < 0.001$ ).

**Table:** Distribution of the studied cases according to Diagnosis and Duration in Cases group (n = 30)

	No.	%
Diagnosis (PV)	30	100.0
Duration (years)		
Min. – Max.	0.08 – 18.0	
Mean ± SD.	2.89 ± 4.17	
Median (IQR)	1.75 (0.33 – 3.0)	

IQR: Inter quartile range

SD: Standard deviation



**Figure:** Comparison between the two studied groups according to percentage Score

## Conclusion

Among Th subsets, Th17 cells produce the signature cytokines IL-17A, IL17F, and IL-22. IL-22 may be implicated in the pathogenesis of autoimmune bullous diseases.