ASSESSMENT OF INFLAMMATORY AND OXIDATIVE STRESS MARKERS IN ATOPIC DERMATITIS.

[1]Nagat Sobhy, [1]Shaimaa Ismail, [2]Nermeen Eldabah, [1]Eman Abdalhakim

[1]Department of Dermatology, Venereology and Andrology, [2]Department of Clinical and Chemical Pathology,
Faculty of Medicine, Alexandria University

Introduction

Atopic dermatitis is the most common chronic inflammatory skin disorder of childhood.

Possible involvement of Th17 in the pathogenesis of AD has been reported by some researchers.

Interaction between Th2 type inflammation and skin defects leads to chronic inflammation which is associated with overproduction of reactive oxygen species (ROS) leading to oxidative stress.

Aim of the work

The present study aimed to investigate serum level of inflammatory and oxidative stress markers in childhood AD patients in comparison to healthy controls.

Subjects and Methods

Enzyme-linked immunosorbent assay was used to measure inflammatory and oxidative stress markers level in the sera of 50 children with AD and 50 healthy control children.

The Eczema Area and Severity Index (EASI) score was used to determine the severity of the disease.

Results

The mean serum level of inflammatory and oxidative stress markers in children with AD was significantly higher than that in the control group.

	Patients n=50	Controls n=50	Analytic test	P value
IL 17(conc) ng/L				
Range	32.85-152.81	24.70-101.90	t=3.277	0.001**
Median	66.92	52.37		
Mean ± S.D.	81.79 ± 39.33	60.53 ± 23.62		
IMA (conc) ng/ml				
Range	13.34-187.54	14.76-78.86	t=3.604	≤0.001**
Median	33.40	22.24		
Mean ± S.D.	61.13±52.15	32.61 ±20.28		

IL-17= inflammatory marker
IMA= Oxidative stress marker

Conclusion

This study confirmed the role of inflammatory and oxidative stress markers in atopic dermatitis.