ABSTRACT BOOK ABSTRACTS



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INFLAMMATORY SKIN DISEASES (OTHER THAN ATOPIC DERMATITIS & PSORIASIS)

PERFORIN-2 BLOOD LEVEL IS SIGNIFICANTLY UPREGULATED IN PATIENTS WITH EXANTHEMATOUS LICHEN PLANUS

M. Vicic⁽¹⁾ - V. Sotosek Tokmadzic⁽²⁾ - M. Kastelan⁽¹⁾ - I. Brajac⁽¹⁾ - L. Prpic Massari⁽¹⁾

Clinical Hospital Center And Medical School Rijeka, Department Of Dermatology, Rijeka, Croatia⁽¹⁾ - *Clinical Hospital Center And Medical School Rijeka, Department Of Anesthesiology, Reanimation And Intensive Care, Rijeka, Croatia*⁽²⁾

Background: Lichen planus is a papulosquamous, inflammatory skin disease, which is for the most part mediated by cytotoxicity. The family of the pore-forming proteins makes part of the total population of cells with cytotoxic potential, which, by the activation of membrane-attack-complex-perforin (MACPF) domain, cause target cell death. Perforin-2 (P-2) is the new-found particle with a possibility of cell membrane perforation, primarily expressed in phagocytes. Our goal was to evaluate a P-2 expression in peripheral blood cells of patients with exanthematous lichen planus, since there are no any reports about it, until now.

Objectives: Our research aimed to investigate the amount of P-2 positive (+) cells in the peripheral blood cells population of patients with exanthematous lichen planus, in comparison with their amount in peripheral blood of healthy controls.

Materials & Methods: We collected peripheral blood samples of patients with exanthematous lichen planus and from healthy controls (10 participants per group). P-2 expression was evaluated in the total peripheral blood cells population, by direct immunofluorescence staining followed by flow cytometry analyses.

Results: Whereas our previous study showed overexpression of P-2+ cells in the lesional lichen planus skin, our present investigation revealed significant upregulation of P-2+ cells in peripheral blood of patients with exanthematous lichen planus, especially within their peripheral blood monocytes. Our present study showed upregulation of P-2 in peripheral blood cells of exanthematous lichen planus patients, which confirmes the prior knowledge of the cytotoxic mechanisms in the pathogenesis of this disease, and additionally complements it with cognition that the same mechanisms contribute the disease acting in the peripheral blood of affected patients.





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