



AUTOIMMUNE CONNECTIVE TISSUE DISEASES

EVALUATION OF TISSUE LEVELS OF GLUTATHIONE S-TRANSFERASES (GST) ISOENZYMES IN PATIENTS WITH DISCOID LUPUS ERYTHEMATOSUS

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Aim: Cutaneous lupus erythematosus (CLE) has a multifactorial pathogenesis involving genetic and environmental triggers and congenital and acquired immune response. The aim of this study was to investigate the effects of Glutathione S-Transferases (GST) isoenzymes including GSTT1, GSTM1, and GSTP1 in the CLE patients with an etiology of solar radiation exposure.

Materials and Methods: Paraffin-embedded skin biopsy sections from the patients were stained by immunohistochemical methods. The results were evaluated under a light microscope by a pathologist. The pattern, localization, and distribution of the immunohistochemical staining were recorded for each patient. Staining of the nucleus or cytoplasm was considered as positive staining. The accuracy of staining was determined based on the intensity and percentage of staining.

Results: No significant difference was found between the patient and control groups regarding staining intensity. In terms of staining percentage, the prevalence of GSTP1-3 genotype was significantly lower in the patient group compared to the control group (25% vs. 63.33%) ($p=0.002$).

Conclusion: No significant difference was observed in the staining intensity of GSTP1, GSTT1, and GSTM1 between the patient and control groups and the staining percentage in some genotypes was even higher in the control group compared to the patient group.

Key words: Glutathione S-Transferases, discoid lupus, solar radiation

