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TNF- α GENE POLYMORPHISMS AND IL-1 β /IL-10 CYTOKINE BALANCE AS
PREDICTORS OF CLINICAL COURSE IN NONSPECIFIC ULCERATIVE
COLITIS

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Background. Ulcerative colitis (UC) is a chronic immune-mediated inflammatory disease of the colon characterized by a heterogeneous clinical course. Genetic susceptibility and dysregulated cytokine signalling, particularly involving TNF- α , IL-1 β and IL-10, are considered key contributors to disease onset, activity and phenotypic diversity; however, their combined diagnostic and prognostic value remains insufficiently defined.

Objective. To evaluate the diagnostic and prognostic significance of TNF- α gene polymorphisms and serum IL-1 β /IL-10 levels in patients with different clinical forms of ulcerative colitis and to identify the most informative predictors of disease severity.

Materials and Methods. Patients with a verified diagnosis of UC, stratified by clinical form (proctitis, left-sided colitis, pancolitis) and disease activity according to the Mayo score, will undergo comprehensive clinical, laboratory (CBC, CRP, ESR) and endoscopic examination. TNF- α promoter gene polymorphisms will be determined by genotyping, and serum IL-1 β and IL-10 concentrations will be measured by ELISA. Associations between genetic, cytokine and clinical parameters will be evaluated using appropriate statistical methods, including multivariable analysis.

Results. The study is at the design and patient-enrolment stage; results will be obtained following completion of clinical, laboratory and genetic examination and will be reported upon statistical analysis of the collected data.

Conclusions. Combined assessment of TNF- α genotype and IL-1 β /IL-10 cytokine balance is expected to improve early identification of patients at risk of a severe or unfavourable course of ulcerative colitis, supporting an individualized diagnostic and prognostic approach.

Keywords: *ulcerative colitis, TNF- α polymorphism, IL-1 β , IL-10, cytokines, prognosis.*

