



ACNE, ROSACEA, AND RELATED DISORDERS (INCLUDING HIDRADENITIS SUPPURATIVA)

ASSESSMENT OF SUBCLINICAL ATHEROSCLEROSIS AND SERUM LEVELS OF SELECTED PROINFLAMMATORY CYTOKINES IN PATIENTS WITH ROSACEA

Sümeysre Seda Ertekin⁽¹⁾ - Mehmet Salih Gürel⁽²⁾ - Ayşe Esra Koku Aksu⁽¹⁾ - Abdurrahim Koçyigit⁽³⁾ - Eray Metin Güler⁽³⁾ - Melis Baykara Uluşan⁽⁴⁾

Istanbul Training And Research Hospital, Dermatology, Istanbul, Turkey⁽¹⁾ - Istanbul Training And Research Hospital, Dermatology, Istanbul, Turkey⁽²⁾ - Bezmialem University Medicine Faculty, Biochemistry, Istanbul, Turkey⁽³⁾ - Istanbul Training And Research Hospital, Radiology, Istanbul, Turkey⁽⁴⁾

Background: Chronic inflammatory diseases have been associated with increased risk of atherosclerotic disorders. Rosacea is a chronic inflammatory disease involving facial skin.

Objective: We sought to evaluate the potential association between subclinical atherosclerosis and rosacea by measuring the intima-media wall thickness (IMT) of the common carotid artery (CCA) in patients with rosacea and evaluating its correlation with selected serum inflammatory cytokines.

Materials and Methods: The mean IMT of the CCA and interleukin-1 beta (IL-1 β), interleukin-6 (IL-6), tumor necrosis factor-alpha (TNF- α) and high sensitive C-reactive protein (hs-CRP) levels in serum were determined in 44 patients and 44 healthy sex- and age-matched control subjects. Patients with history of cardiovascular events, cardiovascular risk factors or concomitant inflammatory condition were excluded from the study.

Results: Serum IL-1 β (p <0,001), IL-6 (p <0,001), TNF- α (p <0,001) and hs-CRP (p <0,001) levels were significantly higher in the patient group compared to the control group. There was no significant difference between the mean carotid IMT (CIMT) values of the patient and control group (p>0,05). Patients with ocular involvement had a significantly greater CIMT compared to the group without ocular involvement (p=0,008). Patients with moderate to severe rosacea had a significantly greater CIMT than those with mild rosacea (p=0,047). There was no significant correlation between CIMT values and inflammation parameters.

Conclusions: Our clinical results indicate that rosacea was not an independent risk factor for the development of subclinical atherosclerosis, although it was found to be associated with increased levels of serum inflammatory cytokines. Not all rosacea patients, but patients with greater severity and/or with eye involvement might be targeted for primary screening for





cardiovascular disease risk reduction.

