The Evaluation of Serum Endocan, ADAMTS-13 and P-Selectin Levels in Predicting Subclinical Atherosclerosis in Patients with Adrenal Incidentaloma

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Abstract

Objectives: To investigate the cardiometabolic risk factors as endocan, dehydroepiandrosterone sulfate (DHEAS), ADAMTS-13, p-selectin as a predictor of atherosclerosis in patients with non-functional adrenocortical adenoma (NFAI). Methods: We included 44 patients with NFAI and 44 healthy individuals as the control group. The demographic, laboratory findings and anthropometric measurements were evaluated. The levels of serum endocan, p-selectin, ADAMTS-13 and carotid intima-media thickness (CIMT) measurement were evaluated. Results: There was no difference between the control group and the patients with NFAI in terms of BMI, WC, systolic and diastolic blood pressure, HDL-C, ACTH, morning cortisol, ADAMTS-13 and p-selectin levels. However, the levels of waist-hip ratio, total cholesterol, insulin, HOMA-IR, LDL-C, CIMT, endocan were significantly higher in the NFAI group in comparison with the control group (p < 0.05). The levels of DHEAS were found significantly lower in the patients with NFAI (p < 0.05). There was a positive correlation between ADAMTS-13, and endocan and p-selectin (r=0.436; p=0.003, r=0.414; p=0.005). Conclusions: This is the first study investigating the relationship between endocan, p-selectin, ADAMTS-13 levels and NFAI. Increased endocan levels and decreased DHEAS levels might be used as the indicators of atherosclerosis in patients with NFAI. CIMT was also found as an independent predictor for NFAI. Evaluation of cardiac and metabolic parameters is important in conservative treatment of patients with NFAI. Key Worlds: Adrenal Incidentaloma, Endocan, P-Selectin, ADAMTS-13

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