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Visfatin and Apelin Are New Interrelated Adipokines Playing Role in the Pathogenesis of Type 2 Diabetes Mellitus Associated Coronary Artery Disease in Postmenopausal Women

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Abstract : Visfatin and apelin are two new adipokines that recently gained a special interest in diabetes research. This study was conducted to study the interplay between these two adipokines and their correlation with other inflammatory and biochemical parameters in type 2 diabetic (T2D) postmenopausal women with CAD. Visfatin and apelin were measured by enzyme-linked immunoassay (ELISA). Visfatin was found to be significantly higher in the following groups: T2D patients without CAD, non-obese and obese T2D patients with CAD when compared to control group. Apelin was found to be significantly lower in non-obese and obese T2D patients with CAD when compared to control group. Visfatin and apelin were found to be significantly associated with each other and with other biochemical parameters. The current study provides evidence for the interplay between visfatin and apelin through the inflammatory milieu characteristic of T2D and their possible role in the pathogenesis of CAD complication of T2D.

Keywords: apelin, coronary artery disease, inflammation, type 2 diabetes, visfatin

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