

## The adipokine Chemerin and Fetuin-A Serum Levels in Type 2 Diabetes Mellitus: Relation to Obesity and Inflammatory Markers

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Chemerin and fetuin-A are recently discovered as metabolic regulator hormone in obesity and type 2 diabetes mellitus. However, elevated levels of chemerin and fetuin-A have been associated with insulin resistance and systemic inflammation. The present study aimed to investigate the significance of serum chemerin and fetuin-A levels in obese diabetic patients. Also, to determine whether, chemerin and fetuin-A along with markers of inflammation (IL6 and CRP) and obesity-related parameters in T2DM patients. Serum levels of chemerin and fetuin-A were evaluated using ELISA in 71 T2DM patients and 14 apparently healthy controls. Both groups were subdivided into obese and lean. Serum chemerin and fetuin-A levels were significantly higher in T2DM patients compared to controls ( $P < 0.001$ , for both) and significantly higher in obese T2DM in comparison to obese control group ( $P < 0.01$  &  $P < 0.05$ , respectively). Serum chemerin and fetuin-A levels correlated positively with HbA1c, HOMA-IR, FBG, IL6 and CRP. In obese patients, serum chemerin and fetuin-A levels correlated positively with BMI and waist circumference. In conclusion, the strong association of chemerin and fetuin-A with insulin resistance and some inflammatory markers may provide an interesting link between obesity, inflammation and diabetes mellitus in human.