

Pro-inflammatory Cytokines in Omani Type 2 Diabetic Patients Presenting Anxiety and Depression

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ABSTRACT

Background: The relationship of inflammatory cytokines with anxiety and depression has been reported, but their role in diabetic patients has not been fully elucidated. **Objective:** We examined whether an association between prevalence of anxiety and depression in Omani type-2 diabetic patients (n=30) and the levels of inflammatory markers such as IL-1 β , TNF- α , IFN- γ and C-reactive protein (CRP) exists. **Methods:** Symptoms of anxiety and depression were screened using the Hospital Anxiety and Depression Scale (HADS) through self-rated questionnaires. IL-1 β , TNF- α , IFN- γ , CRP, anti-TPO and anti-GAD65 antibodies were measured in patients' sera using commercially available ELISA assays. **Results:** In Omani type 2 diabetic patients, high prevalence of anxiety and depression along with high levels of inflammatory markers were detected. However, no correlation was observed between inflammatory markers and anxiety or depression. **Conclusion:** These results indicate that Omani type 2 diabetic patients are at great risk for developing anxiety and depression. Therefore, these complications need more care and attention. There was no association between scores of anxiety and depression with the levels of inflammatory cytokines. This may need to be elucidated in a larger cohort of patients.

Keywords: Antibodies, Anxiety, Depression, Inflammatory Markers, Type-2 Diabetes

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