

Diabetic retinopathy (DR) is the most common microvascular complication of diabetes mellitus. Pigment epithelium-derived factor (PEDF) is a strong inhibitor of angiogenesis. Our aim was to address the predictive value of anti-angiogenic marker (PEDF) for progression of DR. A total of 118 subjects (healthy, diabetic without retinopathy and diabetic retinopathy) were studied. Serum angiogenic inhibitor PEDF were determined and the relationship between the DR, levels of PEDF, age, HbA1c, and duration of diabetes were evaluated. The mean of PEDF in sera of patients with proliferative diabetic retinopathy ( $6.74 \pm 2.20$  Pg/ml) was significantly higher ( $p=0.01$ ) than that of healthy control ( $4.25 \pm 0.81$  Pg/ml); So The levels of PEDF increases with progress of diabetic retinopathy and thus, increased levels of PEDF in the blood indicate microvascular damages in diabetic patients and may be predictor of the progression of DR.