

Anticardiolipin antibodies in diabetic patients: an additional risk factor in the pathogenesis of diabetic retinopathy

Amany M El-Diasty¹, Maha Shahin

Department of Clinical Pathology, Faculty of Medicine, Mansoura University, Mansoura, Egypt.

PMID: 20306674

The natural history and aetiology of diabetic retinopathy (DR) are still not completely understood. Autoantibodies against endothelial antigens could be responsible for initiating vascular injury and could be a marker of endothelial dysfunction. In this study, the prevalence of anticardiolipin (aCL) antibodies in patients with high risk criteria proliferative diabetic retinopathy (PDR) were determined to investigate whether aCL antibodies might be relevant to the pathogenesis of DR. We studied 34 diabetic patients, free of DR, and 36 patients with PDR with high risk criteria (HRC). aCL antibodies (IgG and IgM) were determined using ELISA technique. There was a significant prevalence of aCL antibodies in type 1 diabetics having PDR with HRC (27.8%) while it was only 6.25% of type 2 diabetics having PDR with HRC. All patients who were positive for aCL antibodies had PDR with HRC. The difference was statistically significant. These preliminary findings suggest that aCL antibodies could represent an additional risk factor for PDR acting as a link between the immunological haemostatic systems.