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Serum markers for early detection of peripheral vascular disease in diabetic patients

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Peripheral Vascular Disease (PVD) is a major complication and cause of morbidity in diabetic patients worldwide. Earlier detection of PVD could prove beneficial to the patients at risk. This is a prospective study done to find out whether inflammatory markers like hsCRP, Apo-A, Apo-B, homocysteine help in detecting peripheral vascular disease early. Diabetic patients for more than 3 years without other comorbid illness were included in the study. After getting the ethical committee's approval, the selected subjects, were tested for hsCRP, Apo-A, Apo-B and homocystiene levels and doppler study of lower limb vessels were done. Of the 100 patients, only 25 patients had elevated levels of Apo-A (25%). Apo-B levels were elevated in 67 patients (67%). Highly sensitive CRP was elevated in 63 patients



(63%). The mean age of the study population was 52 years and the mean duration of diabetes was 8 years. 15% of diabetic patients had normal HbA1C and did not have elevated biomarker levels. Patients were followed up for 2 years. Of patients who had elevated biomarkers, 30% developed PVD. This study shows that inflammatory markers like hsCRP, apo-A and apo-B are sensitive markers for early detection of peripher al vascular disease and thereby for reducing morbidity. Tight control of diabetes is quintessential to prevent occurrence of complications of diabetes.

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Biography

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