GLYGEMIG CONTROL AND MIGROANGIOPATHY IN NIDDM

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Epidemiological studies have clearly attested to the dominant contribution by the degree of glycemic control and duration of diabetes mellitus in the causation of microangiopathy. In a group of 52 NIDDM subjects comprising 44 males and 8 females with age range between 55 and 72 years and duration of diabetes more than 20 years, microangiopathy was found in 9 subjects (17.3%)— retinopathy in all the 9 subjects and nephropathy (urinary protein excretion >500mg in 24 hours) in 3 subjects: none of the subjects were in renal failure.

Fasting blood sugar and HbAic were estimated in all the 52 subjects: a fasting blood sugar >120mg % and Hbic>8.5% were the criteria of poor glycemic control. Five out of the 9 subjects with microangiopathy (55.9%) were in poor glycemic control while in the group of 43 subjects without complications, poor glycemic control was present in 25 subjects (58.1%). The prevalence of poor glycemic control in the subgroups with and without microangiopathic complications was similar.

It is concluded that even though glycemic control is a major factor predisposing to the development of microangiopathy, the susceptibility is determined in addition by extra glycemic factors as well.

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