U.K. Prospective Diabetes Study 22. Effect of age at diagnosis on diabetic tissue damage during the first 6 years of NIDDM.

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Diabetes Care. 1997 Sep; 20(9): 1435-41.

OBJECTIVE: To assess the effect of age at diagnosis on the initial prevalence and subsequent risk of the progression of diabetic tissue damage in patients with NIDDM. RESEARCH DESIGN AND METHODS: The prevalence of Q-wave myocardial infarction, absent dorsalis pedis pulses, retinopathy, absent ankle jerks, hypertension, and microalbuminuria were determined at baseline and at 3 and 6 years of follow-up in five consecutive 6-year age-cohorts of 3,027 newly diagnosed white patients aged between 36 and 65 years recruited to the U.K. Prospective Diabetes Study. The effect of age at diagnosis on the initial prevalence and the risk of progression of these complications and associated conditions was analyzed using logistic regression and proportional odds methods, respectively. RESULTS: Q-wave myocardial infarction and hypertension were more prevalent in older patients at presentation, but age at diagnosis did not have a significant effect on the increased risk of either after 6 years of NIDDM. Absent dorsalis pedis pulses and ankle jerks were also more prevalent in the older age-groups at presentation, but age at diagnosis was a significant predictor of the increasing prevalence of both during follow-up. The baseline prevalence of retinopathy and microalbuminuria was not related to age. The subsequent risk of retinopathy, but not microalbuminuria, increased significantly with age at diagnosis. CONCLUSIONS: Age at diagnosis has a variable impact on different types of diabetic tissue damage and may thus be an important variable in epidemiological and intervention studies in NIDDM. Regular ophthalmologic surveillance and examination of the feet increase in importance with increasing age since the diagnosis of NIDDM.