

4. Pennington D, Rush B, Castaldi P (Eds.): Hemolytic anemias. In *G.C. Degruchy's Clinical Haematology in Medical Practice*. 4th Ed. Oxford, Blackwell Scientific, 1978, 328–91
5. Gellady AM, Greenwood RD: G-6-PD hemolytic anemia complicating diabetic ketoacidosis. *J Pediatr* 80:1037–38, 1972
6. Shalev O, Eliakim R, Lugassy GZ, Menczel J: Hypoglycemia induced hemolysis in G-6-PD deficiency. *Acta Haematol* 74: 227, 1985
7. Luzzatto L, Mehta A: Glucose-6-phosphate dehydrogenase deficiency. In *The Metabolic Basis of Inherited Disease*. Scriver CR, Beaudet AL, Sly WS, New York, McGraw-Hill, Valce D, Eds. 1989, p. 2237–65
8. Wolff SP: Potential role of oxidative stress in diabetics and its complications: novel implications for theory and therapy. In *Diabetic Complications: Scientific and Clinical Aspects*. Crabbe MJ, Ed., London, Churchill Livingstone, 1987, p. 167–220
9. Baynes JN: Role of oxidative stress in development of complications in diabetes mellitus. *Diabetes* 40:405–12, 1991
10. Metz SA: Altered arachidonic acid synthesis and lipid peroxidation in diabetes mellitus: possible role in leucocyte dysfunction and other cellular defects. *Med Hypothesis* 12:341–57, 1983

Eye color and IDDM

It has been shown that a relatively large proportion of IDDM patients in southern Germany have a low-pigment eye color (blue or green) compared with nondiabetic control subjects (66 vs. 38%, $P < 0.01$) (1). Although no studies exist concerning the exact percentage, it is commonly accepted that dark eye colors prevail among Greeks.

The eye color of 42 randomly selected IDDM patients and 135 nondiabetic control subjects was evaluated in daylight by the same observer. Study subjects were all Greek in origin. They did not differ concerning mean age and sex (30.1 ± 11.2 vs. 32 ± 11.5 yr of age,

$P = 0.44$; M/F 22/20 vs. 65/70, $P = 0.63$). Classification was done empirically into high-pigment eye color (brown or black iris) and low-pigment eye color (blue or green iris). The prevalence of low-pigment eye color was not significantly different among IDDM patients and control subjects (33.33 vs. 23.7%, $P = 0.21$).

In conclusion, we believe that the described finding of an increased frequency of low-pigment eye color in IDDM patients is not a unanimous observation. The discrepancy between the German study and this one is perhaps attributable to ethnic differences of the studied samples.

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IDDM, INSULIN-DEPENDENT DIABETES MELLITUS.

References

1. Ziegler AG, Baumgartl H-J, Ede G, Held M, Vogt H-J, Kolb HJ, Standl E: Low pigment skin type and predisposition for development of type 1 diabetes. *Diabetes Care* 13:529–31, 1990

Comments on "Prevalence of Carotid Atherosclerosis in Diabetic Patients" by Kawamori et al.

Kawamori et al. (1) give impressive data of their ultrasound measurements of the carotid artery wall. The results concerning the great majority

of their patients (275 NIDDM patients) are evident. The number of the investigated IDDM patients, however, is very small, and we cannot agree with the statements concerning young diabetic patients.

The authors investigated 20 IDDM patients 21–66 yr of age (the NIDDM patients were >30 yr of age). Unfortunately, they do not mention how many patients were included in the group 20–29 yr of age. The number must be far lower than 20, because it is only a part of the group of 20 IDDM patients. In spite of the small number of patients the authors state that the IMT was significantly greater in diabetic than in nondiabetic subjects of this age-group. They conclude, that "young diabetic subjects were found to have advanced atherosclerosis of the carotid arteries." First, an increased IMT is believed to be a sign of early, not advanced atherosclerosis (2–4). Second, our experience would lead us to reject the major conclusion made by the authors.

For the past 2 yr, we have performed a prospective ultrasound study of the carotid artery wall (measuring IMT) in IDDM patients ≤ 40 yr of age. Initial results were presented at the 28th Annual Meeting of the EASD in Prague 1992 (5), including the data of 125 patients. We found alterations of the carotid artery wall (increased IMT and/or plaques) in 21% of our patients with diabetes duration >2 yr. Patients with an increased IMT more often showed nephropathy than patients with normal wall thickness, the difference was highly significant. Moreover, patients with additional plaques showed hypertension and hypercholesterolemia significantly more often than patients with normal carotid artery wall.

Our investigations suggest that the risk of early atherosclerotic lesions of the carotid artery wall in young IDDM patients is increased in the presence of some accompanying diseases, especially nephropathy. IDDM patients without late complications or accompanying dis-