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Letters to the Editor

HLA-Antigens in Long Standing Insulin Dependent Diabetics with Terminal Nephropathy and Retinopathy with and without Loss of Vision

Sir,

In their recent article, Deckert and coworkers [1] find that factors other than genetic factors in the HLA-region and basement membrane thickening are responsible for the development of proliferative retinopathy. We have come to a similar conclusion in an analysis of HLA-types in 126 out of a total of 146 insulin dependent diabetics who during the period 1970–1976 received a renal transplant in Scandinavia [2]. The antigens in the B-series demonstrating significant deviations from the control population [3] are shown in Table 1. A significantly increased frequency of HLA-B8, -Bw15 and B18, and also significant decrease of HLA-B7 and -B12 as compared to the general Norwegian population [3] was found. Fourteen subjects had both -B8 and -Bw15, which was not in excess of the expected. The transplanted diabetics did not differ in tissue types from the general population of Danish insulin-dependent diabetics [4], indicating that tissue types do not influence the development of renal failure.

To investigate whether severe diabetic retinopathy occurs more frequently with certain tissue types, we divided our patients into two groups, 63 who were blind or had impaired vision and 63 who had kept their ability to read at the time of transplantation (Table 2). As can be seen, there were no significant differences in the distributions of tissue types in the two groups.

In conclusion, our results, like those of Deckert and his colleagues [1], do not suggest that the development of nephropathy and/or severe retinopathy is dependent on HLA types.

Yours etc.,

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Table 1. HLA-B types in transplanted Scandinavian insulin dependent diabetics, Danish insulin-dependent diabetics and Norwegian control population

	Transplanted Scandinavian diabetics [2]	Copenhagen, insulin dependent diabetics [3]	Norwegian controls [4]	Significance of difference between transplanted diabetics and controls
(n)	(126)	(109)	(1628)	
HLA-B8	44%	42%	25%	< 0.0005
HLA-Bw15	35%	35%	20%	< 0.0005
HLA-B18	14%	–	5%	< 0.0005
HLA-B7	19%	–	30%	< 0.01
HLA-B12	17%	–	29%	< 0.005

Table 2. HLA-B antigens and diabetic retinopathy in Scandinavian insulin-dependent diabetics who have received a renal transplant

	Retained reading vision	Impaired vision or blind
(n)	(63)	(63)
HLA-B8	43%	46%
HLA-Bw15	35%	35%
HLA-B18	10.5%	19%
HLA-B7	16%	22%
HLA-B12	19%	14%

None of the differences are significant ($p > 0.05$)

References

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