

Mersey has changed its policy

EDITOR,—We agree with Helen Ward and John S Yudkin that diabetic retinopathy should not be a contraindication to the use of thrombolysis in myocardial infarction.¹ In September 1991 one of us (RCW) expressed concern locally that the practical difficulty of excluding diabetic retinopathy could easily lead to diabetic patients being denied thrombolysis. The need for a rapid decision, often without the benefit of case notes and after opiate analgesia, posed particular problems for the receiving team.

Subsequently, discussion took place in Mersey region among diabetologists, ophthalmologists, and cardiologists in their respective subcommittees of the regional medical committee. It was agreed that diabetic retinopathy should no longer be regarded as a contraindication to thrombolysis for two reasons: firstly, the potential benefits of a lifesaving treatment outweigh the possible harm of a complication that is not life threatening; and, secondly, even if a vitreous haemorrhage does occur the prognosis for vision is relatively good, especially with the widespread availability of vitrectomy.

In October 1993 the Mersey regional thrombolysis policy was modified to state that "proliferative diabetic retinopathy is no longer regarded as an absolute contraindication to thrombolysis." We are unaware of any cases of vitreous haemorrhage in patients with diabetes receiving thrombolysis for myocardial infarction since then.

We are sceptical about Ward and Yudkin's suggestion that patients should have a voice in the decision about whether they should receive thrombolysis. Surely this is already a time of crisis for the patients, when their judgment may be clouded by anxiety and the effect of drugs. They should be spared the further stress of a discussion about a treatment that seems to have such clear overall benefit.

Finally, we are pleased to note that future editions of the *British National Formulary* will state that caution is required in diabetic retinopathy rather than that the condition is a contraindication. We wonder, however, whether such a caution can still be justified.

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1 Ward H, Yudkin JS. Thrombolysis in patients with diabetes. *BMJ* 1995;310:3-4. (7 January.)

Risk of intraocular haemorrhage remains unknown

EDITOR,—Helen Ward and John S Yudkin conclude that thrombolysis should not be withheld in diabetic patients with retinopathy.¹ We have shown that diabetic subjects are less likely to receive this treatment than non-diabetic controls.²

The authors note that there has been only one case report of intraocular bleeding in diabetic patients after thrombolysis (in a patient with treated proliferative retinopathy).³ The condition may, however, be underreported. Furthermore, intraocular bleeding may be rare only because patients with proliferative diabetic retinopathy rarely receive thrombolysis. We retrospectively analysed 507 diabetic patients who had been admitted to our coronary care unit with an acute myocardial infarction during 1 January 1991 to 30 June 1994. Of the 172 who received thrombolytic treatment, only 14 had diabetic retinopathy and

none had proliferative changes. Of the 26 patients with proliferative retinopathy, none received thrombolytic treatment. Intraocular haemorrhage did not occur in patients with or without diabetic retinopathy.

This important issue can be fully addressed only by a prospective case-control study. While thrombolysis is of proved value in diabetic patients, the risk of precipitating intraocular haemorrhage remains unknown. We agree that diabetic retinopathy should not be regarded as an absolute contraindication to thrombolysis, but it may sway the balance against this treatment when the potential benefit is marginal—for example, in those presenting relatively late.

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1 Ward H, Yudkin JS. Thrombolysis in patients with diabetes. *BMJ* 1995;310:3-4. (7 January.)

2 Fava S, Azzopardi J, Agius Muscat H, Fenech FF. Factors that influence outcome in diabetic subjects with myocardial infarction. *Diabetes Care* 1993;16:1615-8.

3 Caramelli B, Tranchesi B Jr, Gebara OCE, Ferreira De Sa LC, Fileggi FJC. Retinal haemorrhage after thrombolytic therapy. *Lancet* 1991;337:1356-7.

Non-insulin dependent diabetes mellitus and non-Hodgkin's lymphoma

Already reported

EDITOR,—The association between non-insulin dependent diabetes mellitus and non-Hodgkin's lymphoma reported by Toshiki Natazuka and colleagues is not necessarily a random observation.¹ Colleagues and I found an association between lymphoid neoplasms, blood dyscrasias, and diabetes mellitus in 1966.^{2,3}

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1 Natazuka T, Manabe Y, Kono M, Murayama T, Matsui T, Chihara K. Association between non-insulin dependent diabetes mellitus and non-Hodgkin's lymphoma. *BMJ* 1994; 309:1269. (12 November.)

2 Lisker SA, Brody JI, Beizer LH. Abnormal carbohydrate metabolism in patients with malignant blood dyscrasias. *Am J Med Sci* 1966;252:282-8.

3 Brody JI, Merlie K. Metabolic and biosynthetic features of lymphocytes from patients with diabetes mellitus: similarities to lymphocytes in chronic lymphocytic leukaemia and diabetes mellitus. *Br J Haematol* 1970;19:193-201.

Number of people with non-Hodgkin's lymphoma and population based controls with self reported history of diabetes mellitus in studies in Kansas and in Iowa and Minnesota

	Controls	Non-Hodgkin's lymphoma			
		All	Nodal	Extranodal	Nodal status unknown
<i>Kansas</i>					
History of diabetes:					
No	869	161	107	52	2
Yes	67	8	5	3	0
Odds ratio*		0.54	0.50	0.66	
95% Confidence interval		0.2 to 1.2	0.2 to 1.3	0.2 to 2.3	
<i>Iowa and Minnesota</i>					
History of diabetes:					
No	1070	544			
Yes	76	33			
Odds ratio*		0.89			
95% Confidence interval		0.6 to 1.4			

*Odds ratio adjusted for age (20-39, 40-59, 60-79, ≥80). History of diabetes was unknown for 12 controls and one person with nodal non-Hodgkin's lymphoma in Kansas and 99 controls and 45 people with non-Hodgkin's lymphoma in Iowa and Minnesota.