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Letters to the editor

Eating disorders and retinal lesions in Type 1 (insulin-dependent) diabetic women

Dear Sir,

Since 1983 several reports [1–5] have emphasized a high frequency in the association between eating disorders and Type 1 (insulin-dependent) diabetes mellitus. Furthermore, Steel et al. [6] have reported an unusually high prevalence of early microangiopathic lesions in young diabetic women with anorexia and/or bulimia. In order to check this point we have compared Type 1 diabetic patients with and without eating disorders.

Twenty-nine Type 1 diabetic women with eating disorders followed-up in the Hôtel-Dieu diabetic unit by the consultant psychiatrist between 1984 and 1988 were studied. Nine had anorexia nervosa with compulsive eating periods and 20 had bulimia according to the DSM IIIr classification [7].

Twenty-nine Type 1 diabetic women were matched for age (26.2 ± 0.9 vs 27.8 ± 0.9 years) duration of the disease (9.2 ± 0.7 vs 10.9 ± 1.3 years) and age at onset of diabetes (17.1 ± 1.1 vs 16.9 ± 1.2 years) (mean ± SEM).

The degree of retinopathy was established by retinal angiography (Table 1). Glycosylated haemoglobin was calculated on average from the results of the preceding 12 months.

Patients with eating disorders were less well controlled than control patients ($HbA_{1c} = 10.8 \pm 0.4$ vs $8.1 \pm 0.3\%$; $p < 0.001$). Among patients with eating disorders 38% were free from retinal lesions compared to 80% of the control group (Table 1). Control diabetic patients did not complain of symptomatic neuropathy while three patients with bulimia had autonomous neuropathy (nocturnal diarrhoea and/or gastroparesia).

The "self induced glycosuria" described by Hudson et al. [8] is a supplementary tool used by insulin-treated young diabetic females, besides vomiting, to lose weight. Not only are insulin doses not increased but insulin is stopped in order to increase the "osmotic purge". Even if they do use automonitoring of diabetes this is directed to help the bulimia and not to control blood glucose. This reflects a quest for performance which is characteristic of the personality of these patients.

It is difficult to know whether the increased rate of diabetic lesions observed here and previously reported by Steel et al. (though without a control group [6]) is due to the bad control of diabetes, to malnutrition or to both. But the reality of increased lesions and their early onset justifies a meticulous detection of eating disorders, particularly of bulimia, in young diabetic women and girls. These disorders are probably very frequent: according to Stancin et al. [9] among 59 insulin-treated diabetic women, aged 18 to 30 years, who replied to a questionnaire (from 93 contacted) 58% had an abnormal compulsive eating behaviour; 12% were bulimic on DSM IIIr criteria and 40% admitted having used the "osmotic purge" for the purpose of losing weight. Early diagnosis might be of paramount therapeutic importance for inducing psychological and/or psychiatrical treatment.

Yours sincerely,
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Table 1. Retinal lesions among Type 1 (insulin-dependent) diabetic women with or without eating disorders (ED)

Retinal lesions	ED (+)	ED (−)	*p* value
None	11	23	< 0.001
Micro aneurysms	12	2	< 0.001
Exudate/diffusion	5	2	NS
Ischaemia and/or preproliferative retinopathy	1	1	NS
Proliferative retinopathy with or without macular oedema	0	1	NS

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