shown by weak antibodies, such as islet cell antibodies. However, from the results of this study, it is not possible to conclude that islet cell antibodies are produced in response to trauma; more sensitive techniques may be needed to establish a potential causative role for these antibodies.

Yours sincerely,

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The Course of Impaired Glucose Tolerance

Sir,

Professor H. Keen and his colleagues [Diabetologia (1982) 22, 73–78], have rightly drawn attention to our limited ability to predict metabolic deterioration in subjects with impaired glucose tolerance. Our own experience is similar [1].

Subjects with impaired tolerance are a heterogeneous group and their behaviour, which may have many determinants, is variable. Their final two sentences require some comment, however. Firstly, not everyone would agree that impaired glucose tolerance is not to be equated with 'early diabetes' [2].

How many are a 'few'? Depending on criteria used, at least 8.9% and at worst 52.5% of a group of female chemical diabetic patients (impaired glucose tolerance) were calculated to deteriorate over a 10 year period – and this in a group who had already had at least one normal glucose tolerance test as a condition of entry to the study [3]. Forty-five percent deteriorated to overt diabetes over 10 years in the Birmingham study [4], 59% of a group with fasting blood glucose > 6 mmol/l deteriorated to an undefined level over 23 years [5] and 29% became diabetic over 10 years in a Swedish study [6]. Professor Keen himself reports that 15% deteriorate to diabetes in 10 years, but if obese at baseline, this rises to 19.5%. (This is already higher than one might expect from the previously reported 8.5% over 8.5 years in the same Bedford population [7]).

Recently Fajans [8] has reported that asymptomatic kindred of known maturity onset diabetes of the young subjects with normal or impaired glucose tolerance deteriorate slowly to diabetes (up to 24 years). Eighty percent (12/15) with impaired glucose tolerance progressed to diabetes. As a consequence, although the incidence may be low, the eventual prevalence of diabetes may be high.

From the above studies, 29%–59% is a significant minority in whom impaired glucose tolerance does appear to equate with 'early diabetes'. These people will have considerable influence upon the use of expensive health care facilities and their early recognition may allow successful intervention [6].

Finally, in our enthusiasm to state the case that the majority of subjects with impaired glucose tolerance may not have a progressive condition, we must not lose sight that a diagnosis of impaired glucose tolerance does carry risks in its own right, e.g. for coronary heart disease [9] and that subjects with impaired glucose tolerance *are* as a group 'at risk' of metabolic deterioration and require careful follow-up.

Yours sincerely,

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