

## European Medical Research Group (Meeting held on 12 June 1990)

The European Medical Research Group met at the Medical Society of London, Lettson House, on 12 June 1990. The guest speaker was Dr Ian Munro, formerly Editor of *The Lancet* who gave a lecture on 'Are there too many medical journals?'.  
Following a period of questions and discussion, a poster session was held demonstrating the research in progress of some members of the Group. Their abstracts are published below.

### Relationship of glycosylated haemoglobin to oral glucose tolerance test; establishing a normal range of HbA<sub>1</sub> in the healthy elderly (Abstract)

E.C. Mulkerrin, J.D. Arnold, D.A. Sykes, R. Dewar, A. Rees and M.S.J. Pathy

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Little is known about the normal range of glycosylated haemoglobin (HbA<sub>1</sub>) in healthy elderly and to our knowledge this has only been established in a community of Chinese subjects. HbA<sub>1</sub> is often used to assess diabetic control in elderly diabetic patients. Theoretically the HbA<sub>1</sub> would be expected to be higher in healthy elderly subjects, as the incidence of impaired glucose tolerance rises with age.

We carried out oral glucose tolerance tests (OGTT) (using WHO criteria) in healthy elderly subjects not known to have diabetes and without significant cardiac renal or respiratory disease who were attending Day Hospital or outpatient clinics. Fifty eight patients participated in the study of whom 44 were not diabetic on WHO criteria. The mean HbA<sub>1</sub> in this group of patients was 6.5% (s.d. = 0.95). From our study the normal range for healthy elderly subjects was 4.6–8.4%. The 'Corning' method was used to assay HbA<sub>1</sub> (interassay coefficient of variation was 4.5), and the established normal range for our laboratory is 5–8%.

It appears from our study that although the upper limit of normal range for HbA<sub>1</sub> seems higher in elderly subjects the difference is minimal.

### Extrapancreatic actions of sulphonylureas: absence of effect on hepatic insulin extraction (Abstract)

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Sulphonylureas have several extrapancreatic actions and animal studies suggest modulation of hepatic uptake of endogenously secreted insulin as one of them. This study examined the effect of gliquidone, an oral sulphonylurea, on hepatic insulin extraction in healthy subjects.

Seventeen healthy subjects with a mean age of 46 years (range 20–70) participated in this single blind randomized cross over design study. Each subject was given either placebo or gliquidone 30 mg, together with 75 g glucose. Venous samples were taken at intervals for glucose, insulin, C-peptide and gliquidone concentrations for a period of 4 hours.

The C-peptide response was significantly higher after gliquidone administration compared to placebo. The mean total insulin response to C-peptide response molar ratio gives an index of hepatic insulin extraction, and this ratio was not significantly different after administration of gliquidone (mean 8, s.d. 3.4) compared to placebo (mean 7.8, s.d. 3.0).

The single dose administration of sulphonylurea appears not to change hepatic insulin extraction in humans.