COMMENTS AND RESPONSES

Response to Comment on: Chang et al. A 25-Year Longitudinal Evaluation of Gastric Emptying in Diabetes. Diabetes Care 2012;35: 2594-2596

e thank Dr. Dhatariya (1) for his interest in our recent article (2) and are pleased to have the opportunity to clarify the issues raised.

Our primary aim was to evaluate the stability of gastric emptying over time in individuals with diabetes, and we found a remarkably strong relationship between the measurements of solid emptying obtained at baseline and some 25 years later. In other words, in contrast to the substantial interindividual variation in the rate of emptying, there was minimal variation within individuals over many years. Moreover, emptying that was initially classified as either normal or abnormal tended to remain in these categories at long-term follow-up. This information is of relevance to the management of diabetes; for example, type 2 diabetic patients with slow gastric emptying may be less likely to benefit from treatment with a glucagonlike peptide 1 agonist (3).

We acknowledge the limitation that follow-up measurements of gastric emptying at 25 years were performed in a relatively small proportion of the original cohort, due to death, loss of contact, or refusal to take part, although there were no substantial differences in baseline characteristics in the group studied, other than age, from the remainder of the cohort. The proportion of patients in the current study with abnormally slow solid emptying at baseline (8 of 13) was numerically higher than in the remainder of the original cohort (30 of 73), but this difference was not significant. Dr. Dhatariya comments about the proportion of patients with upper gastrointestinal symptoms, but appears to be referring to the proportion with delayed emptying; the two are not necessarily closely related (4). In our study, symptoms were reported as a numerical score, rather than as being present or absent.

We also acknowledge that the majority of the follow-up data were from patients with type 1 diabetes. This is not surprising, since in the original cohort the mean age of type 2 diabetic patients at entry was 61 years, and accordingly, it would be expected that few would be available for follow-up 25 years later. We agree that further information about the natural history of gastric dysfunction in type 2 diabetes would be of value.

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- 1. Dhatariya K. Comment on: Chang et al. A 25-year longitudinal evaluation of gastric emptying in diabetes. Diabetes Care 2012;35:2594–2596 (Letter). Diabetes Care 2013;36:e29. DOI: 10.2337/dc12-1782
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