Doctor





Limited evidence for targeting intensive glycaemic control in type 2 diabetes

Clinical question

How effective is targeting intensive glycaemic control for type 2 diabetes?

Bottom line

Intensive treatment regimens are usually directed towards an average glycosylated haemoglobin A1c level (HbA1c) of 7.0% or less. There was insufficient evidence to demonstrate whether targeting intensive glycaemic control influenced all-cause or cardiovascular mortality. Intensive glycaemic control was likely to reduce the risk of microvascular disease (retinopathy, nephropathy) as a composite outcome and may reduce the occurrence of some other specific outcomes, such as non-fatal myocardial infarction and lower extremity amputation. Targeting intensive glycaemic control, compared with conventional glycaemic control, increased the risk of severe adverse events including both mild and severe hypoglycaemia.

Caveat

Separate analysis of intensive glycaemic control as a part of a multimodal treatment regimen could not be performed due to lack of data. Although it was not possible to pool quality of life data, it is conceivable that targeting intensive, compared with conventional glycaemic control, may negatively affect quality of life for patients aiming to cope with sometimes very complex and time-consuming treatment modalities and combinations.

Context

Patients with type 2 diabetes exhibit an increased risk of cardiovascular disease and mortality compared with the background population. Observational studies report a relationship between reduced blood glucose and reduced risk of both microvascular and macrovascular complications in patients with type 2 diabetes.

Cochrane Systematic Review

Hemmingsen B, et al. Targeting intensive glycaemic control versus targeting conventional glycaemic control for type 2 diabetes mellitus. Cochrane Reviews, 2011, Issue 6. Article No: CD008143. DOI: 10.1002/14651858.CD008143.pub2. This review contains 20 studies involving 29,986 participants.

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