Insulin Initiation and Intensification

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Sir,

I read the guidelines from the CID-2015 expert group in the article “Consensus on insulin dose and titration algorithms in ambulatory care of type 2 diabetes in India” by Kovil et al. with great interest.1 At the outset I congratulate the Journal, CID-2015 expert group and the members of the expert committee for the recommendations on an issue of public health concern particularly with availability of limited epidemiological data from India. Many professional associations at the global as well as national level have published their own algorithms on initiation, titration and intensification of insulin regimens. In these algorithms, the regimen options vary, glycemic targets also vary but the aim is to guide the treating physicians at large. So, these algorithms are very relevant in the present era of evidence based medicine.

However I have the following areas of concern

1. The titration algorithms: Having different titration schedules for different blood glucose levels in ambulatory setting defeats the purpose of these guidelines in Indian population. The simplest titration schedules widely advocated are 2 units every 3rd day and is based on clinical trials.2-10. The dictum is start low and go slow. The aim is to ensure patients can manage self-titration and avoid hypoglycaemia. Every initiation and titration dose of insulin is a trial and response has to be monitored. Further, what is the evidence for the mentioned titration schedule? Even the percentage based schedules as advocated by AACE are cumbersome.11

2. Titration of twice daily premix insulin/co-formulation regimens: As per these guidelines the titrated dose adjustments have to be made either at pre-breakfast or pre-dinner dose. But here the regimen is twice daily premix insulin/co-formulation regimens. Most of the guidelines split the calculated titrated insulin dose between the pre-breakfast and pre-dinner doses.

3. The guidelines are silent on the concept of “overbasalization”. What should be the limit of basal insulin dose after titrations? At what dose of basal insulin should intensification be considered?

References


3. RSDO Clinical Practice Recommendations for Management of Type 2 diabetes Mellitus - 2015 [Last accessed on 2017 Mar 5].


8. Gerstein HC, Yale JF, Harris SB, Issa M, Stewart JA, Dempsey E. A randomized trial of adding insulin glargine vs. avoidance of insulin in people with type 2 diabetes on either no oral glucose-lowering agents or submaximal doses of metformin and/or sulphonylureas: the Canadian INSIGHT (Implementing New Strategies with Insulin Glargine for Hyperglycaemia Treatment) study. Diabetologia 2006; 23:736-742.

