Reviewer's report

Title: Assessment of endogenous insulin secretion in insulin treated diabetes predicts postprandial glucose and treatment response to prandial insulin

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Reviewer: Fernando Guerrero-Romero

Reviewer's report:

In this study authors assess the relationship between endogenous insulin secretion as measured by 90 minute post mixed meal serum C-peptide and the postprandial glucose increment in a standardized mixed meal text and the response to exogenous prandial insulin by change in mixed meal glucose increment when exogenous prandial insulin is given. They conclude that endogenous insulin secretion is predictive of postprandial hyperglycemia and response to prandial exogenous insulin.

Major concerns

Data about methodological design, target population, sampling strategy, inclusion- and exclusion criteria, matching criteria, sample size estimation are missing.

Analysis stratified by gender is mandatory.

Because the physiopathology of Type 1 and Type 2 diabetes is not the same, the response to insulin differs between these patients; so, an analysis stratified by type of diabetes is required.

Anthropometric and biochemical characteristics of subjects in study are necessary.

Which was the age of diagnosis for the type 2 diabetic individuals?

One way ANOVA test (or Friedman analysis) with pot-hoc test should be used to compare more than two groups.

Level of interest: An article of insufficient interest to warrant publication in a scientific/medical journal

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests'