Reviewer’s report

Title: Serum levels of Pancreatic Stone Protein (PSP)/reg1A as an indicator of beta-cell apoptosis suggest an increased apoptosis rate in hepatocyte nuclear factor 1 alpha (HNF1A-MODY) carriers from the third decade of life onward

Version: 1 Date: 14 February 2012

Reviewer: Gustavo Frechtel

Reviewer’s report:

Major Compulsory Revisions

1) The study is too small to show reliable results.
2) It is not properly demonstrated that PSP/reg 1A is a good marker of human pancreatic beta cells apoptosis.
3) The sensitivity and specificity of the method by which PSP/reg 1A levels are determined is not properly demonstrated, being that the cut-offs used are critical for the results.

Minor Essential Revisions

1) The correlation of PSP/reg 1A levels between the different groups of diabetic patients (type 1 diabetes, GCK MODY and HNF1A MODY) was not done.
2) The correlation between insulin secretion and PSP/reg 1A in the other groups than HNF1A MODY was not done.
3) The total cholesterol, HDL cholesterol, LDL cholesterol, and triglycerides levels are not good markers of lipotoxicity
4) Total white cells count or neutrophils count are not good markers of inflammatory acute phase.
5) In table 1 fasting C peptide was determined in the different groups, then the correlation between PSP/reg 1A and insulin secretion is analyzed through calculated AUC insulin in HNF1A MODY. It is known that C peptide in OGTT is the best marker of insulin secretion.
   The correlation between PSP/reg 1A and insulin secretion were not determined in the other groups.
6) Progressive loss of beta cell function is seen in diabetic patients related to diabetes duration, but not with increasing age. Why the analysis was done under or over 25 years old? What about diabetes duration in these groups?
7) It is very important to know the glucose levels during the OGTT, in order to analyze correlation between AUC insulin and PSP/reg 1A.

Quality of written English: Acceptable
Declaration of competing interests:

I declare that I have not competing interests in relation to this paper.