Author's response to reviews

Title: Possible modulatory effect of endogenous islet catecholamines on insulin secretion

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PDF covering letter
Dear Dr. Veitch:

Thank you very much for the fast review and kind comments on our manuscript.

According to the reviewers’ comments, these are our own comments:

To N Morgan’s report:
We have previously measured TH activity in rat isolated islets, and shown that feeding the animals with a diet composed only by carbohydrates induces a significant increase in the enzyme activity, together with a marked decrease in the glucose-induced insulin release by isolated islets (1). Thus, the effect of MIT upon insulin secretion described in our report was not completely unexpected. We understand that new experiments measuring the effect of MIT upon islet TH activity and catecholamine release could further support our results. On the other hand, in our study we have measured catecholamine release by fresh isolated islets incubated in the presence of low and high glucose in the medium. The results show (page 5, lines 20 to 23) that in this experimental condition high glucose (16.7 mmol/L) induced a selective and significant increase in catecholamine release (dopamine and noradrenaline). However, as already mentioned in our previous letter, we cannot perform such experiments since they were made in cooperation with an investigator from another research group who is no longer in the country.

In this work we have tested whether endogenous islet catecholamines also exert such effect in a paracrine fashion. To confirm that the effect obtained with yohimbine and prazosin is also seen with other selective α2 and α1 antagonist, we must perform other experiments with the presence of additional adrenergic antagonists. In this case, we will need at least two months (from now) to perform the experiments and analyze the data thus obtained.

We hope that according to the above comments we will be granted the necessary time to perform those experiments and complete the study to make the manuscript suitable for publication in your journal.

Looking forward to your answer,

Yours,

Dr. Borelli and Dr. Gagliardino

References included in this letter:

1.- Gagliardino J.J., Borelli M.I. and Rubio M. Possible role of endogenous islet catecholamines in the paracrine control of insulin secretion. *European Association for the Study of Diabetes (EASD)*. 32nd Annual Meeting, Viena, Austria, 1-5 de Septiembre de 1996.