Author’s response to reviews

Title: Depression, smoking, physical inactivity and season independently associated with midnight salivary cortisol in type 1 diabetes

Authors:

Eva O Melin (eva.melin@ltkronoberg.se)
Maria Thunander (maria.thunander@ltkronoberg.se)
Mona Landin-Olsson (mona.landin-olsson@med.lu.se)
Magnus Hillman (magnus.hillman@med.lu.se)
Hans O Thulesius (hansthulesius@gmail.com)

Version: 4 Date: 19 August 2014

Author’s response to reviews: see over
To BMC Endocrine Disorders, 19/08/2014.

Dear professor Timothy Shipley, editor-in-chief of BMC Endocrine Disorders,

We hereby resubmit our manuscript (1888199225130058) titled “Depression, Smoking, Physical Inactivity and Season independently associated with Midnight Salivary Cortisol in Type 1 Diabetes” by authors Eva O Melin, Maria Thunander, Mona Landin-Olsson, Magnus Hillman, Hans O Thulesius.

We are glad you continue to show interest in our manuscript and we have followed your advice. You wished that we should include information about the trial into the manuscript as follows:

"Although you provided information about the trial in your cover letter, we require you to include this information in brief in the methods. You do not need to include the findings (a reference will suffice) or the name of the manuscript ("Affect School and Script Analyses (ASSA) compared with Basic Body Awareness Therapy (BBAT) in patients with diabetes, high HbA1C and psychological symptoms ¿ a randomized controlled trial") you are yet to submit. A brief statement with the full name of the trial plus TRN, purpose, outcome measures, current status plus reference 1 and 2 will be enough."

Answer: We have written in the manuscript in the section “Methods” at rows 99-107 as follows: “This study presents cross sectional baseline data from the randomized control trial (RCT) “Psychological variables and hyperglycemia in diabetes mellitus” (ClinicalTrials.gov: NCT01714986) which targets psychological symptoms in patients with diabetes and inadequate glycemic control in a population based cohort of patients with type 1 diabetes. A first baseline study showed that depression, obesity and smoking were independently associated with high HbA1c [4]. Results of the intervention arms “Affect School with Script Analysis” and “Basic Body Awareness Therapy” [34, 35] will be followed up in 2015 with primary outcome prevalence of depression and secondary outcomes HbA1c levels and prevalence of alexithymia and anxiety.”

We have also done the following changes to the manuscript:

We have added in the Abstract at row 32: “diabetes duration, severe hypoglycemia episodes”.

In the section “Discussion”, at the row 267 we have added antidepressants; at rows 289-290 we have changed into “a disturbance of the circadian rhythm characterized by a flatter diurnal slope of cortisol secretion”; at rows 337-340 we have added “Other subjects for future research are to explore and compare the effect on the HPA axis of the different subtypes of antidepressants, and to explore the effects of psycho education and stress reducing techniques on depression and cortisol secretion in patients with type 1 diabetes[2, 3].

In the section “Conclusions” we have excluded “and treatment tailored to the individual patient, by antidepressant medication, psycho education, or psychotherapy are suggested. Increased physical activity may reduce depressive symptoms and maintain the effects of antidepressive treatment, and attenuate age related cortisol responses to stress.”
Finally we have made efforts to comply with the authors´ checklist for manuscript formatting.

Sincerely,

Eva Melin, MD, PhD student (defending PhD later this year).
Endocrinology and Diabetes, Department of Clinical Sciences, Lund University, Lund.
Department of Research and Development, Kronoberg County Council, Växjö.
Primary Care, Kronoberg County Council, Växjö, Sweden.