DECREASED LEVEL OF MELATONIN IN TYPE-2 DIABETIC PATIENTS AND INFLUENCE OF ADIPOSITY AND SMOKING

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The Purpose of the present study was to evaluate the serum levels of melatonin in type-2 diabetic patients and to clarify whether there is an influence of adiposity and smoking.

Patients & Methods: 26 type-2 diabetic (T2D) patients were recruited in the pilot study and 12 healthy subjects (non-smokers) were selected as controls (C). The study groups were matched for age and sex. Melatonin was measured in saliva by ELISA. Statistical analyses were performed using SPSS Statistic software.

Results: Patients with T2D had significantly lower melatonin level than healthy control subjects (p<0.003), besides T2D patients with adiposity (BMI >30 kg/m²) had significantly lower melatonin level than patients without adiposity (p<0.035), as well as T2D smokers had significantly lower melatonin level than T2D non-smokers.

Conclusion: T2D patients are associated with decreased melatonin level in saliva. Adiposity and smoking have influence on the decrease of melatonin concentration of T2D patients.

Biography
Peteris Tretjakovs completed his PH.D. Currently he is a professor of physiology and the head of department of Human physiology and biochemistry at the Riga Stradins University in Latvia.

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