DETECTION OF HYPOGLYCEMIA IN TYPE2 DIABETIC PATIENTS

Authors: Sofia Tsirona, Christos Pappas, Eleni Kandaraki, Georgia Kassi, Genovefa Chronopoulou and Evanthia Diamanti-Kandarakis

Hospitals: Endocrine Unit, Diabetes Center and Biochemistry Laboratory Athens Euroclinic, Athens Greece. Endocrine Unit 3rd Department of Medicine University of Athens Medical School

OBJECTIVES

• Hypoglycemia may be a life – threatening condition and has been also associated with increased mortality and cognitive decline. In addition, cost for hypoglycemic episodes hospitalization and management may be high.
• Aim of the study: To compare different methods of detection of hypoglycemic episodes in type 2 diabetic patients. [continuous glucose monitoring (CGM) vs self monitoring of blood glucose (SMBG)].

RESULTS

• 10 type 2 diabetics recorded at least one hypoglycemic episode by CGM vs 4 patients who recorded at least one hypoglycemic episode as illustrated by SMBG (58.8% vs 23.5%, p=0.07).
• From those 10 patients who recorded hypoglycemia from CGM only 2 (11.8% of type 2 diabetics) mentioned symptoms.
• 23 hypoglycemic episodes were recorded by CGM vs 8 episodes recorded by SMBG (mean 1.35 vs 0.48, p=0.008).
• 23.5% of diabetic subjects were detected by CGM suffering from nocturnal hypoglycemia. None nocturnal hypoglycemic episodes was detected by SMBG, since none self monitoring measurement was performed during sleep.
• 23.5% of diabetic patients were detected with unawareness hypoglycemia during the day by CGM vs 12.5% who were detected with unawareness hypoglycemia during the day by SMBG.
• The recorded hypoglycemic episodes did not seem to be associated with a regimen including insulin.

CONCLUSIONS

In type2 diabetic patients more hypoglycemic episodes (mainly nocturnal and unawareness hypoglycemias) are detected using CGM than SMBG.

REFERENCES

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• Hospitalized in the General Ward and Treated With a Basal Bolus Insulin Regimen
• Observational prospective study.