

The First 30 Egyptian Patients with Type 1 Diabetes on 14-Day Factory Calibrated Glucose Monitoring System: Clinical Usefulness

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ABSTRACT

BACKGROUND:

According to the International Diabetes Federation (IDF), Egypt is considered as one of the top ten countries with people living with diabetes. Patients with type 1 diabetes do not have easy access for certified diabetes educators & nutritionists in developing countries like Egypt. Furthermore, management of type 1 diabetes carries great challenges between lowering glycated hemoglobin (HbA1c) level & increase risk of hypoglycemia. This study was conducted to study the clinical usefulness of 14-Day factory calibrated glucose monitoring system among Egyptian patients with T1D.

SUBJECTS AND METHODS:

we recruited in our study patients with T1DM aged > 18y & their HbA1c ranging from 6.5-9gm% & willing to participate in the study and motivated to receive diabetes education lectures. We excluded in our study other types of diabetes or any associated comorbidities & those who are not motivated to participate. Moreover, 60 patients were included, 30

of them are control group receiving education & asked to measure their blood glucose at least 3 times daily or when symptoms of hypoglycemia are felt. On the other hand, the case group were 30 patients with factory calibrated glucose monitoring system. After two weeks we revise the cases group glucose reading from the sensor & we told them to make some changes in insulin injection time or their lifestyle.

RESULTS:

After 3 months the cases group have statistically significant lower level of attacks of severe hypoglycemia & nocturnal hypoglycemia. Although the fasting plasma glucose & HbA1c were lower in the case group, but it was numerically only without statistical significance.

CONCLUSION:

Patients with type diabetes with repeated nocturnal & severe hypoglycemia get benefits from 14-Day factory calibrated glucose monitoring system

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