SAFETY AND EFFICACY OF INSULIN DEGLUDEC IN PATIENTS WITH TYPE 1 DIABETES MELLITUS AFTER ONE YEAR OF TREATMENT

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Introduction

Insulin degludec appears to be releated with reduced risk of hypoglycemia compared to other basal insulins. The aim of the present study was to evaluate the safety and efficacy of insulin degludec in patients with type 1 diabetes mellitus (T1DM).

Materials and Methods

We studied 31 patients with type 1 diabetes mellitus (61.3% males, mean age = 45.5 ± 17.6 years). Patients were switched to insulin degludec after at least two years of treatment with another basal insulin and were followed by another year after this switch.

Conclusions

In patients with T1DM, switching from other basal insulins to insulin degludec reduces the risk of hypoglycemia and improves glycemic control without the need to increase insulin doses.

Results

Patients were previously treated with insulin glargine (77.4%) or detemir (22.6%). During the 24 months prior the switch to insulin degludec, 29 patients (93.5%) experienced at least 1 non-severe hypoglycemic episode (mean = 12.7 ± 3.7 episodes, among 4.6 ± 1.9 episodes occurred during nightime). During the 12 months after the switch to insulin degludec, 4 patients (12.9%) experienced a non-severe hypoglycemic episode (1, 2, 1, 3 episodes respectively, among which none occurred during nightime). At the time of switch to insulin degludec, HbA_1c and plasma glucose levels were 7.0 ± 0,6% and 130 ± 15 mg/dl, respectively and after 12 months decreased to 6.1 ± 0.2 % and 100 ± 9 mg/dl, respectively ($p< 0.001$ for both comparisons). The dose of insulin degludec did not differ from the dose of the previously administered basal insulin and the dose of prandial insulin did not change during treatment with insulin degludec. No change observed on body weight.

References

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