



Presentation 957-P / 957 Usefulness of Insulin Degludec in Older Patients with Type 2 Diabetes Poorly Controlled by Previous Insulin Therapy

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Abstract:

Purpose: In the treatment of older patients with type 2 diabetes, both maintaining relatively good glycemic control and avoiding hypoglycemia are important, but it is not easy by previous insulin regimens. This study assessed the efficacy of insulin degludec (IDeg) with ultra-long duration of action, in older patients with type 2 diabetes poorly controlled by previous insulin therapy. **Subjects and Methods:** We studied 52 (male 24/female 28) out-patients with 65 years or older, whose HbA1c was over 7.0% or higher by the treatment with previous insulin for 6 months. The age of the subjects was 76.5 ± 8.27 (mean \pm SD) years; the duration of diabetes 14.5 ± 7.0 years; HbA1c 8.1 ± 0.9 %; total insulin 29 ± 21 Units; Basal-bolus (n=24), 50Mix 3 times (n=15), 30Mix twice (n=1), BOT (n=12). We changed the basal insulin to IDeg for 1 year and examined BMI, HbA1c, FPG, 2-hour postprandial PG, standard deviation of 7 days self-measured FBS, hypoglycemia, serum HDL/LDL level, TG, prescribed dose of insulin, and QOL scores using ITR-QOL (Insulin Therapy Related QOL) and DTSQ (Diabetes Treatment Satisfaction Questionnaire). **Results:** One year after the start of IDeg treatment, HbA1c, FPG, postprandial PG, the standard deviation of FBS were significantly decreased from 8.1 ± 0.9 to 7.2 ± 0.6 %, 144 ± 23 to 126 ± 19 mg/dl, 232 ± 42 to 190 ± 25 mg/dl, 22.6 ± 9.4 to 8.5 ± 2.5 (p<0.01), respectively. Hypoglycemia associated with symptoms was significantly decreased from 0.3 ± 0.83 to 0.0 ± 0.11 times/month (p=0.047). No significant change was seen in BMI, LDL, or HDL, but TG was significantly decreased from 144 ± 51 to 122 ± 40 mg/dl (p<0.01). The IDeg dose was significantly increased from 15.0 ± 8.9 to 15.7 ± 8.9 Units, but no significant change was seen in total insulin dosage. The QOL scores were significantly increased in the treatment satisfaction scores (from 5.3 ± 0.9 to 5.6 ± 0.8 and from 5.4 ± 0.8 to 5.7 ± 0.6 , p<0.05). **Conclusion:** Insulin Degludec was suggested to be useful in older patients with type 2 diabetes.