

The effect of CSII on glycemic control in T2DM: a retrospective study in 60 patients with T2DM with a follow up of 24 months.

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Introduction

The available clinical evidence on continuous subcutaneous insulin infusion (CSII) for type 2 diabetes (T2DM) is not yet consistent.

We determined the effectiveness of insulin pump use in patients with T2DM who have failed multiple daily injection (MDI) therapy.

Results

- After 2 years a reduction in HbA1c was observed from 8,5% tot 8,2 %.
- A clinically relevant reduction in HbA1c $\geq 0.5\%$ after 2 years of CSII treatment was found in 45% (n=27) of our patients.
- In 33 % (n=20) the HbA1 level increased, while in 22% (n=13) HbA1c didn't change after 2 years of CSII treatment.

Materials and Methods

In this retrospective study, charts of patients with T2DM who were started on CSII after failure of MDI were reviewed. The change in hemoglobin A1c (HbA1c), to 24 months was determined.

60 patients (32 men and 28 women) with a mean age of 55 years and a mean duration of diabetes of 12 years were identified in the study.

The mean BMI was 30 kg/m².

Conclusions

- CSII significantly improves glucose control in 45% patients with DM2 who have failed MDI after 2 years of CSII therapy.
 - In 33% of our patients the glucose control deteriorated despite the use of frequent bolus adjustment incorporating carbohydrate counting and current glucose level.
 - More data are needed on selecting which people with T2DM should receive insulin pumps.
- In all patients CSII improved quality of life and treatment satisfaction.*

Tabel

Mean age 55 years	Mean duration diabetes 12 years	Mean BMI 30 kg/m²
Mean Hba1c start 8,5%	Mean HbA1 after 1 year 7,9%	Mean HbA1c after 2 years 8,2%
Decrease HbA1c > 0,5% 45% (after 2 years CSII)	Increase HbA1c 33% (after 2 years CSII)	HbA1c unchanged 22% (after 2 years CSII)