



DIABETES DURATION BASED INITIATION OF INSULIN: IMPACT ON CLINICAL OUTCOMES, INSULIN DOSAGE AND QUALITY OF LIFE



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BACKGROUND AND AIMS

Insulin is usually initiated after several months or years of persistently raised blood sugar values when combination oral therapies fail. Delay in initiating insulin therapy invariably result in higher total daily dose of insulin, glycemic variability and subsequent complications. Early insulin initiation is often difficult due to multiple fears and inertia. We evaluated the benefits of diabetes duration based initiation of insulin among type 2 diabetes (T2D) patients.

METHOD

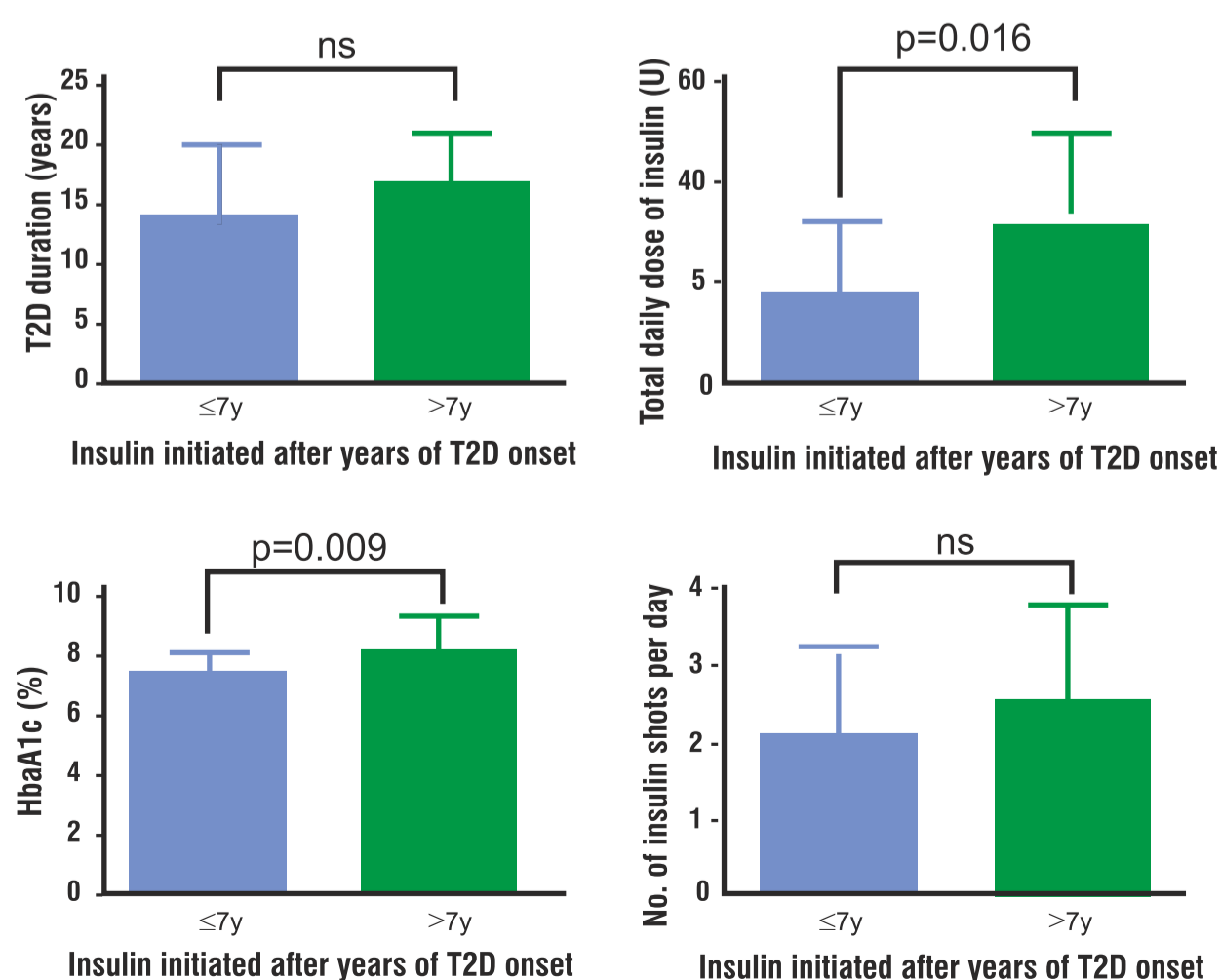
T2D patients were categorized into two groups based on their history of insulin initiation

- Group 1: initiated on insulin at ≤ 7 years of T2D onset (n= 80, T2D duration 13.67 ± 5.60 yrs, age 58.47 ± 8.73 yrs, 64.88% male)
- Group 2: initiated on insulin at > 7 years of T2D onset (n= 85, T2D duration 16.29 ± 3.82 yrs, age 59.14 ± 9.81 yrs, 66.67% male)

Impact of early initiation of insulin therapy on clinical outcomes and quality of life (QoL) were evaluated.

RESULTS

- Patients initiated with insulin earlier during the course of T2D, showed better clinical outcomes than those who were initiated on insulin therapy only at a later stage.
- Group 1 demonstrated significant reductions in Total Daily Dose of insulin (18.22 ± 13.12 U vs. 31.29 ± 18.30 U, $p=0.016$) and HbA1c ($7.17 \pm 0.70\%$ vs. $7.97 \pm 1.04\%$ $p=0.009$).
- 99.98% reported improved QoL after being on insulin.
- 92.75% reported that injections did not impair their day to day activities.



CONCLUSIONS

Diabetes duration dependent initiation of insulin is highly beneficial in not only achieving glycemic targets but also reducing the total daily dose of insulin and enhancing the QoL. The current practice of insulin initiation with increasing HbA1c and widespread prevalence of diabetes complications calls for a revision of recommendations.

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