

# CONTINUOUS SUBCUTANEOUS INSULIN INFUSION DECREASES HYPOGLYCEMIA DURING NIGHT-TIME

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## INTRODUCTION

Continuous subcutaneous insulin infusion (CSII) and multiple daily injections (MDI) are forms of intensified insulin therapy and the most used regimens for type 1 diabetes (T1D). Due to its continuous basal output, hypoglycemic events tend to be rarer with CSII. Our goal was to evaluate the differences in nocturnal hypoglycemia between these two treatment strategies.

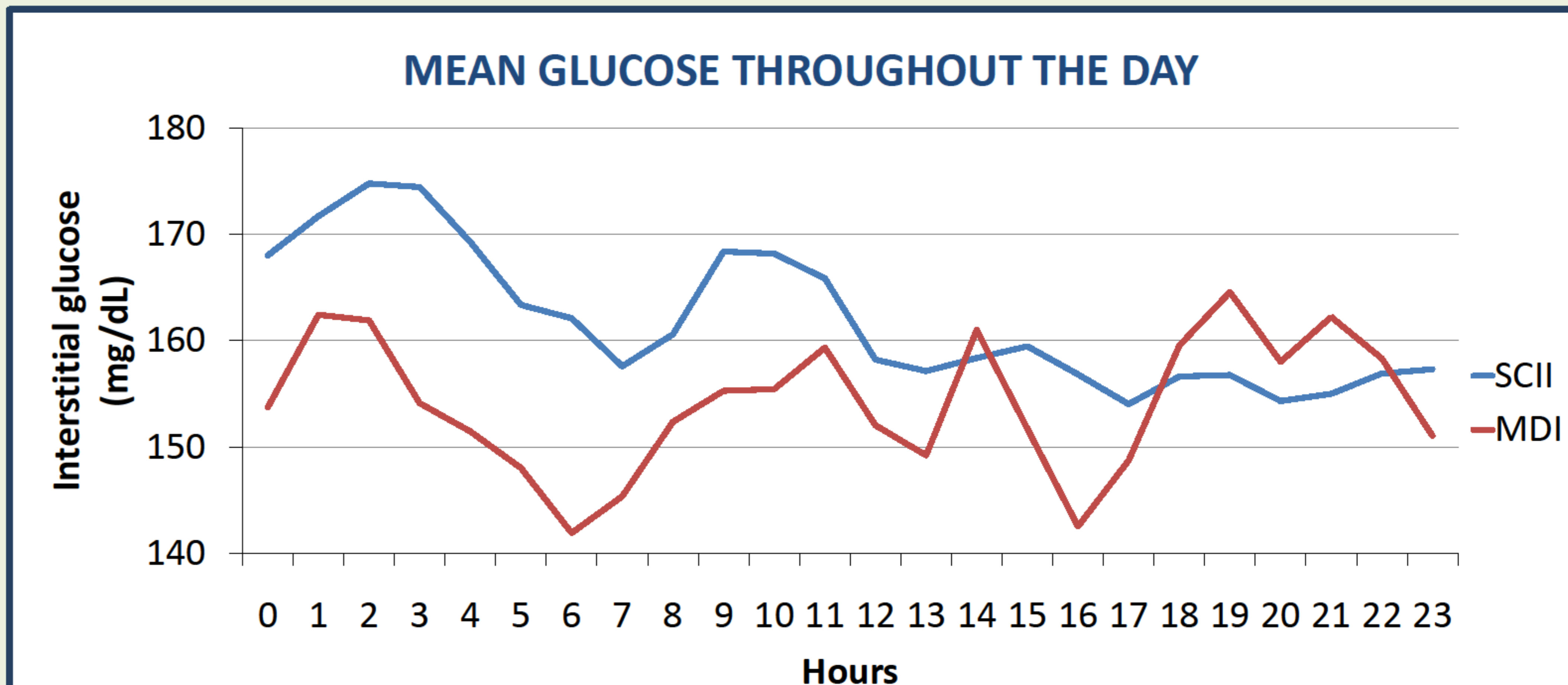
## PATIENTS AND METHODS

Retrospective analysis of 61 patients who had performed continuous glucose monitoring (Ipro™2 – Medtronic, Northridge, CA). All patients had T1D and were either on CSII or MDI. Hypoglycemia was defined as glucose level less than 70 mg/dL. Daytime (DT) was defined as the period from 7am to 11pm and night-time (NT) was from 11pm to 7am.

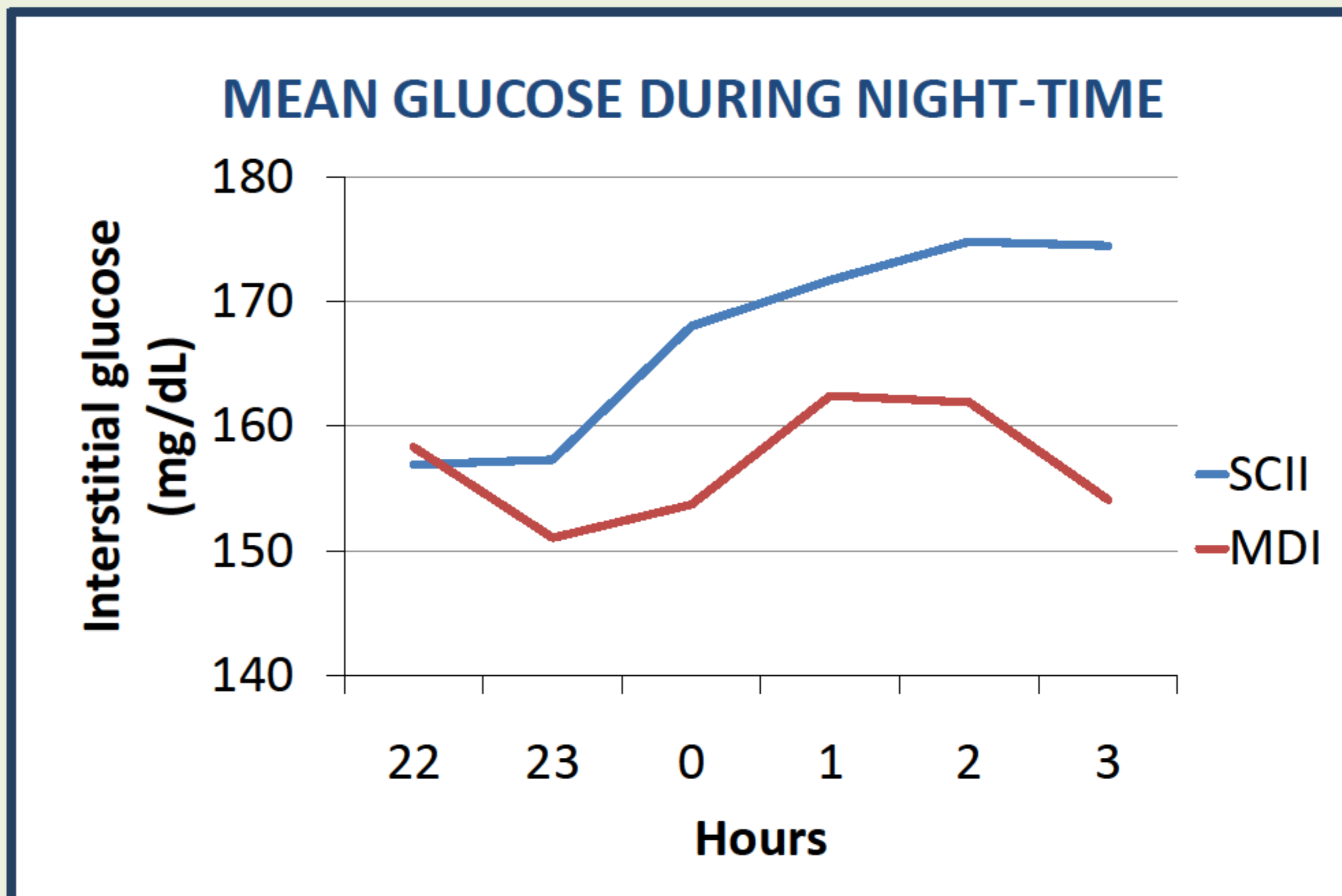
## RESULTS

**NR. OF GLUCOSE MEASUREMENTS:  
112714**

SAMPLE CHARACTERISTICS	MEAN±SD
Age (years)	31.7±8.8
BMI (Kg/m <sup>2</sup> )	22.7±7.5
Glucose (mg/dL)	156±73
Female gender (%)	57
DM duration (years)	17.7±9.6



	CSII	MDI	p VALUE
Interstitial glucose measurements (N)	42132	70582	
Age (years)	33.0	31.2	<0.05
DM duration (years)	19.4	16.4	<0.05
Mean Glucose (mg/dL)	162	154	<0.05
Hypoglycemic events (N)	2608	7410	<0.05
Night-time hypoglycemic events (N)	786	2841	<0.05
HbA1c	7.9	8.0	NS



## CONCLUSION

Despite similar HbA1c in the two groups, hypoglycemia is more frequent in the MDI group, particularly at NT period.

## BIBLIOGRAPHY

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