

SUPPLEMENTARY DATA

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Supplementary Table S1. Clarke Hypoglycemia Unawareness Questionnaire-Relevant Questions

	Case	Control	<i>p-value</i>
	N =101	N=100	
Check the category that best describes you: (check one only)			<0.001
I always have symptoms when my blood sugar is low	17 (17%)	57 (57%)	
I sometimes have symptoms when my blood sugar is low	69 (68%)	39 (39%)	
I no longer have symptoms when my blood sugar is low	15 (15%)	4 (4%)	
Have you lost some of symptoms that used to occur when your blood sugar was low?			0.001
Yes	76 (75%)	48 (48%)	
No	25 (25%)	52 (52%)	
How low does your blood sugar need to go before you feel symptoms?*			0.002
60-69 mg/dL	22 (22%)	46 (46%)	
50-59 mg/dL	32 (32%)	35 (35%)	
40-49 mg/dL	25 (25%)	15 (15%)	
<40 mg/dL	20 (20%)	3 (3%)	
To what extent can you tell by your symptoms that your blood sugar is low?			<0.001
Never	6 (6%)	0	
Rarely	11 (11%)	6 (6%)	
Sometimes	42 (42%)	19(19%)	
Often	31 (31%)	32 (32%)	
Always	11 (11%)	43 (43%)	

*Response missing for 2 cases and 1 control

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Supplementary Table S2. Severe Hypoglycemia Frequency

	Case	Control
	N=101	N=100
All	101	100
Severe Hypoglycemia Since T1D Diagnosis		
0 events	-	33 (33%)
1 event	4 (4%)	16 (16%)
2-4 events	9 (9%)	17 (17%)
5-9 events	14 (14%)	18 (18%)
10-19 events	21 (21%)	7 (7%)
≥20 events	53 (52%)	9 (9%)

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Supplementary Table S3. Blinded Continuous Glucose Monitor Data from Subsets of Day and Night

	Case	Control	<i>p-value</i> [‡]
	N=101	N=100	
DAYTIME^α (8 am to 8 pm)			
Mean Glucose- <i>mean±SD</i>	178±32.3	180±36.4	0.67
Percentage of Time <70 mg/dL-%	6.1 (3.3, 9.9)	4.2 (1.9, 8.7)	0.03
Percentage of Time <60 mg/dL-%	4.3 (1.7, 7.0)	2.5 (1.1, 5.1)	0.02
Percentage of Time <50 mg/dL-%	2.2 (0.7, 4.6)	1.2 (0.3, 2.7)	0.008
Percentage of Time >180 mg/dL-%	43.7 (34.1, 53.9)	41.8 (30.8, 58.4)	0.84
Percentage of Time in Range (70-180 mg/dL) -%	48.6 (41.1, 58.5)	52.0 (40.8, 61.0)	0.33
Glucose Variability [‡] -%CV	43.6 (38.1, 47.8)	40.1 (35.6, 45.3)	0.006
NIGHTTIME^Ω (midnight to 4 am)			
Mean Glucose- <i>mean±SD</i>	168±41.4	167±43.2	0.50
Percentage of Time <70 mg/dL-%	6.0 (1.2, 13.8)	6.1 (0.0, 13.1)	0.59
Percentage of Time <60 mg/dL-%	3.6 (0.1, 9.4)	2.6 (0.0, 8.7)	0.32
Percentage of Time <50 mg/dL-%	1.6 (0.0, 8.0)	0.6 (0.0, 6.2)	0.21
Percentage of Time >180 mg/dL-%	38.2 (21.1, 53.6)	36.3 (20.1, 56.0)	0.60
Percentage of Time in Range (70-180 mg/dL) -%	53.9 (40.6, 63.4)	53.8 (40.8, 64.2)	0.66
Glucose Variability [‡] -%CV	40.0 (33.5, 49.0)	38.0 (31.6, 45.3)	0.08

Unless otherwise indicated, all values are medians (25th, 75th percentile)

[‡]P value adjusted for age and SMBG; rank scores used to obtain p value

^αDaytime CGM data missing for 3 cases and 1 control

[‡]Coefficient of variation (CV) of glucose variability [(std dev/mean of glucose)*100]

^ΩNighttime CGM data missing for 10 cases and 6 controls