

Table1; Demographic data, Boog glucose level and cognitive tests between the two groups

Variable	Case (n=40)	Control (n=40)	P value
Patient characteristics			
Gender, Male	21	15	0.178
Age/years Mean $\pm$ SD	55.62 $\pm$ 4.049	55.67 $\pm$ 3.912	0.9550
Duration of illness/year Mean $\pm$ SD Range	4.750 $\pm$ 2.72 1-10		
Blood glucose tests and treatment			
HbA1c, Mean $\pm$ SD	7.760 $\pm$ 0.943	5.058 $\pm$ 1.270	0.001
FBS, Mean $\pm$ SD	9.35 $\pm$ 2.55	4.30 $\pm$ 0.71	0.0001
Postprandial blood glucose;mmol Mean $\pm$ SD	12.69 $\pm$ 2.39	5.37 $\pm$ 0.59	0.0001
Type of treatment among cases (oral hypoglycemic) (insulin)	24 (60%) 16(40%)		
BMI, Mean $\pm$ SD	30.275 $\pm$ 4.5797	25.050 $\pm$ 4.4199	0.001
P300 latency and Amplitude			
P300 Latency; msec	279.00-600.0 342.61 $\pm$ 30.98	276.00-363.00 328.12 $\pm$ 23.98	0.0001
P300 amplitude; mv	1.20-17.80 8.09 $\pm$ 2.784	6.81-19.12 7.43 $\pm$ 3.97	0.0001
Wisconsin Test			
Total errors No, Mean $\pm$ SD	26.684 $\pm$ 8.111	26.475 $\pm$ 13.301	0.934
Preservative errors %Mean $\pm$ SD	20.27% $\pm$.18%	7.70% $\pm$ 7.50%	0.001
Tower of London test			
Total time, Mean $\pm$ SD	748.342 $\pm$ 284.273	14.473 $\pm$ 43.650	0.001
Trail Making Test			
TMT-A (total time), Mean $\pm$ SD	47.30 $\pm$ 16.85	40.75 $\pm$ 12.49	0.03
TMT-B (total time), Mean $\pm$ SD	103.48 $\pm$ 54.29	82.78 $\pm$ 28.10	0.01
Accuracy	0.631 $\pm$ 0.191	0.821 $\pm$ 0.108	0.001
Extra moves	49.00 $\pm$ 15.52	29.54 $\pm$ 18.74	0.001
Continuous performance test			
Correct trials, Mean $\pm$ SD	287.037 $\pm$ 60.080	322.725 $\pm$ 31.177	0.002
Commission, Mean $\pm$ SD	16.630 $\pm$ 6.301	18.625 $\pm$ 6.364	0.211
Omission, Mean $\pm$ SD	56.370 $\pm$ 65.280	12.300 $\pm$ 12.089	0.001
Corsi test and Digit span test			
Corasi test (memory span) Mean $\pm$ SD	2.438 $\pm$ 1.001	3.863 $\pm$ 1.891	0.001
Digital span test			0.001
-Forward, Mean $\pm$ SD	5.175 $\pm$ 1.217	6.863 $\pm$ 1.506	
-Backward, Mean $\pm$ SD	3.50 $\pm$ 1.00	4.67 $\pm$ 2.15	

HbA1c Glycosylated hemoglobin, FBS, Fasting blood sugar in mmol, TMT; Trail Making Test, MI; body mass index

Table (2) Patient correlation between total scores of cognitive function tests; ERPs variables, clinical variables:

Variables	P -value
Age	0.026
Duration illness	0.021
HbA1c	0.001
BMI	0.414
Amplitude P300	0.004
Latency P300	0.012

HbA1c; Glycosylated hemoglobin, BMI; body mass index

Table3 Patient correlation between ERPs variables (p300), age of the patient

ERPs variables(p300).	Age(years)	Duration of diabetes	Diabetic control (HbA1c)		
			Good	poor	P value
P300Latency; msec	0.638 (p=0.01)	0.398 (p=0.158)	5.8	4.4	0.002
P300 amplitude; mv	0.382 (p=0.17)	0.397 (p=0.160)	3.7	2.1	0.303

ERPs event-related potential, *HbA1c*; Glycosylated hemoglobin,