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Exercise to preserve β-cell function in recent-onset Type 1 diabetes mellitus (EXTOD) - a randomized controlled pilot trial

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Supplementary Table 3 - Well-being, exercise, and health at 6 and 12 months

6/12m means are adjusted for their baseline scores using ANCOVA model. Within-group differences are paired t-tests from un-adjusted scores between two time points.

		mean (± SE)		Mean difference at Baseline (95% CI)	Mean difference at 6 months (95% CI)	Mean difference at 12 months (95% CI)
	Baseline (mean ± SD)	6 months	12 months			
Well-being						
EQ5D – This a standardized instrument for measuring generic health status. Here we have reported the results from the visual analogue scale hen participants rate their health on a score of 0 – 100, with 100 being the best health.						
CONTROL	74.00 (17.71)	72.01 (4.65)	71.85 (3.90)			
EXERCISE	75.69 (15.31)	68.37 (4.18)	73.72 (4.02)			
Within CONTROL					-2.12 (-11.20 to 6.97)	-2.76 (-11.66 to 6.13)
Within EXERCISE					-7.21 (-14.47 to 0.04)	-1.31 (-9.26 to 6.63)
INTERVENTION vs CONTROL				1.69 (-7.09 to 10.47)	-3.64 (-16.34 to 9.05)	1.86 (-9.64 to 13.36)
CES-D – Depressive symptoms This questionnaire measures symptoms of depression and 8 different items, including: Sadness, Loss of Interest, Appetite, Sleep, Concentration, Guilt, Fatigue, Agitation and Suicidal Ideation. Here we give the total score with a range of 0-60 the higher the score the more symptoms.						
CONTROL	8.37 (5.64)	10.33 (2.03)	7.37 (1.70)			
EXERCISE	10.66 (9.63)	7.92 (1.86)	10.14 (1.75)			
Within CONTROL					-0.14 (-3.18 to 2.91)	-2.09 (-4.94 to 0.76)
Within EXERCISE					-0.96 (-6.06 to 4.15)	0.64 (-4.47 to 5.74)
INTERVENTIONvs CONTROL				2.28 (-1.98 to 6.55)	-2.40 (-8.16 to 3.36)	2.77 (-2.30 to 7.85)
Exercise Questionnaires						
Bandura exercise self-efficacy questionnaire. This questionnaire assesses at participants' confidence in their ability to exercise regularly. Here we show the mean score of the 18 items. Each question is scored from 0-100, with a higher score meaning greater confidence.						
CONTROL	64.46 (24.39)	62.44 (3.55)	52.44 (4.11)			
EXERCISE	64.57 (25.81)	65.76 (3.29)	67.01 (4.11)			
Within CONTROL					-2.24 (-15.14 to 10.66)	-11.69 (-23.74 to 0.37)
Within EXERCISE					1.38 (-11.34 to 14.11)	2.10 (-10.56 to 14.76)
INTERVENTIONvs CONTROL				0.10 (-13.24 to 13.44)	3.23 (-6.50 to 13.14)	14.57 (2.74 to 26.40)

Outcome expectations for exercise. In this questionnaire participants' are asked to rate (1-5) 9 positive outcome expectation and − 9 items negative outcome expectation statements. The mean of the score of the 13 statements is then calculated. The higher the score the greater the expectation from exercise.

CONTROL	3.79 (0.80)	3.98 (0.18)	4.02 (0.15)			
EXERCISE	4.04 (0.58)	3.58 (0.17)	4.08 (0.17)			
Within CONTROL					0.05 (-0.38 to 0.48)	0.24 (-0.14 to 0.62)
Within EXERCISE					-0.34 (-0.63 to -0.04)	0.04 (-0.28 to 0.35)
INTERVENTIONvs CONTROL				0.25 (-0.12 to 0.62)	-0.40 (-0.92 to 0.12)	0.07 (-0.40 to 0.53)

Illness questions

Problem areas in Diabetes (PAID). This is a 20-item questionnaire that is widely used for measuring diabetes-related emotional distress. The final possible score is 0-100, with higher scores indicating greater diabetes-related emotional distress.

CONTROL	38.85 (16.26)	37.54 (2.86)	35.78 (3.35)			
EXERCISE	40.93 (13.12)	34.59 (2.63)	37.42 (3.46)			
Within CONTROL					-2.91 (-12.12 to 6.30)	-4.62 (-14.14 to 4.91)
Within EXERCISE					-4.98 (-12.22 to 2.27)	-1.87 (-9.92 to 6.19)
INTERVENTIONvs CONTROL				2.08 (-5.90 to 10.05)	-2.96 (-10.89 to 4.97)	1.68 (-8.23 to 11.52)

Hypoglycaemia Behaviour. This was assessed using the The Hypoglycemia Fear Survey II. The first part of this questionnaire consists of 15 statements about behaviour to avoid hypoglycaemia that the participants' have to rank 0 (never) to 4 (always). The total score is 0-60. The higher the score the more change the participants' have made to avoid hypoglycaemia.

CONTROL	0.46 (0.58)	0.27 (0.08)	0.35 (0.11)			
EXERCISE	0.59 (0.87)	0.22 (0.08)	0.16 (0.11)			
Within CONTROL					-0.21 (-0.44 to 0.01)	-0.12 (-0.35 to 0.10)
Within EXERCISE					-0.34 (-0.63 to -0.04)	-0.41 (-0.74 to -0.08)
INTERVENTIONvs CONTROL				0.12 (-0.27 to 0.51)	-0.04 (-0.27 to 0.19)	-0.19 (-0.51 to 0.12)

Hypoglycaemia Worry. This was assessed using the The Hypoglycemia Fear Survey II. The second part of this questionnaire consists of 18 statements about fear of hypoglycaemia that the participants' have to rank 0 (never) to 4 (always). The total score is 0-60. The higher the score the greater the fear of hypoglycaemia.

CONTROL	0.88 (0.95)	0.28 (0.13)	0.42 (0.15)			
EXERCISE	1.07 (1.08)	0.42 (0.13)	0.43 (0.15)			
Within CONTROL					-0.61 (-0.97 to -0.24)	-0.46 (-0.82 to -0.10)
Within EXERCISE					-0.64 (-1.04 to -0.23)	-0.64 (-1.04 to -0.24)

| INTERVENTIONvs CONTROL | 0.19 (-0.35 to 0.73) | 0.13 (-0.23 to 0.49) | 0.01 (-0.41 to 0.44) |

Health Care Climate Questionnaire. This questionnaire assess patients' perceptions of the degree to which their team of health care providers is autonomy supportive. They score 6 statements 1-7 and the mean of the 6 items is calculated. The higher the score the greater the perceived autonomy support.						
CONTROL	4.43 (1.97)	4.62 (0.28)	4.68 (0.29)			
EXERCISE	4.22 (1.79)	5.46 (0.27)	5.71 (0.29)			
Within CONTROL					0.24 (-0.78 to 1.26)	0.27 (-0.72 to 1.25)
Within EXERCISE					1.20 (0.33 to 2.07)	1.47 (0.57 to 2.37)
INTERVENTIONvs CONTROL				-0.20 (-1.20 to 0.79)	0.84 (0.05 to 1.63)	1.02 (0.20 to 1.85)