LKI-VS

Impact of a compression garment, on top of the usual care, in patients with breast cancer with early disturbance of the lymphatic transport: a randomized controlled trial

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Contents

INFO

Research questions

Zie protocol.

Statistical methodology

Logistic regression analysis was used for both primary endpoints, studying the difference between the preventive treatment and control group over the follow-up period. Generalized estimating equations were used to account for repeated measurement. Model covariates include time and treatment group. Baseline lymphedema was included as a covariate in the analysis of lymphedema. The main effect of the preventive treatment was estimated by odds ratios (OR) with 95% confidence interval. Both analyses are evaluated at the 2.5% significance level to account for multiplicity.

Binary secondary outcomes were analyzed in the same fashion as the primary outcome analysis. Baseline outcome measurements were included as covariates in the analysis model.

Continuous secondary outcomes were analyzed using linear model for repeated measurements. An unstructured residual covariance matrix was modelled to account for the longitudinal data structure Baseline outcome measurements were included as covariates in the analysis model. The main effect of the preventive treatment was estimated by mean differences with 95% confidence interval. All secondary analyses are evaluated at the 5% significance level.

All tests are two-sided. Analyses have been performed using SAS software (version 9.4 of the SAS System for Windows).

1. DESCRIPTIVE INFO

Baseline info

Variable	Statistic	Control	Treatment	P-value
Leeftijd	N	20	19	0.014
	Mean	49.90	59.84	
	Std	12.756	11.591	
	Median	47.50	63.00	
	IQR	(39.50; 59.50)	(49.00; 69.00)	
	Range	(29.00; 82.00)	(39.00; 76.00)	
BMI	N	20	19	0.391
	Mean	25.33	27.46	
	Std	4.491	6.532	
	Median	24.15	26.28	
	IQR	(22.82; 28.18)	(21.85; 30.48)	
	Range	(17.85; 35.50)	(18.29; 40.40)	
TypeOP				
1	n/N (%)	20/20 (100.00%)	15/19 (78.95%)	0.047
2	n/N (%)	0/20 (0.00%)	4/19 (21.05%)	
OpDOm				
neen	n/N (%)	9/20 (45.00%)	11/19 (57.89%)	0.527
ja	n/N (%)	11/20 (55.00%)	8/19 (42.11%)	
ExtendLK				
level II	n/N (%)	3/20 (15.00%)	2/19 (10.53%)	1.000
level III	n/N (%)	17/20 (85.00%)	17/19 (89.47%)	
Tstage				
1	n/N (%)	5/20 (25.00%)	4/19 (21.05%)	0.887
2	n/N (%)	7/20 (35.00%)	9/19 (47.37%)	
3	n/N (%)	3/20 (15.00%)	3/19 (15.79%)	
4	n/N (%)	5/20 (25.00%)	3/19 (15.79%)	
Nstage				
0	n/N (%)	2/20 (10.00%)	2/19 (10.53%)	0.475
1	n/N (%)	12/20 (60.00%)	7/19 (36.84%)	
2	n/N (%)	3/20 (15.00%)	4/19 (21.05%)	
3	n/N (%)	3/20 (15.00%)	6/19 (31.58%)	

Variables presented with percentages are analysed using a Fishers Exact test. Variables summarized by means, medians,... are analysed using a Mann-Whitney U test. All reported p-values are two-sided

Variable	Statistic	Control	Treatment	P-value
AantLK	N	20	19	0.768
	Mean	19.10	19.95	
	Std	6.545	7.215	
	Median	18.50	21.00	
	IQR	(14.00; 25.00)	(15.00; 25.00)	
	Range	(8.00; 31.00)	(8.00; 35.00)	
AantposLK	N	20	19	0.806
	Mean	1.90	3.11	
	Std	2.049	4.370	
	Median	1.50	1.00	
	IQR	(0.00; 3.00)	(0.00; 6.00)	
	Range	(0.00; 8.00)	(0.00; 16.00)	
Postopcompl				
neen	n/N (%)	4/20 (20.00%)	3/19 (15.79%)	1.000
ja	n/N (%)	16/20 (80.00%)	16/19 (84.21%)	
RT				
neen	n/N (%)	2/20 (10.00%)	0/19 (0.00%)	0.487
ja	n/N (%)	18/20 (90.00%)	19/19 (100.00%)	
RT oksel				
neen	n/N (%)	16/20 (80.00%)	18/19 (94.74%)	0.342
ja	n/N (%)	4/20 (20.00%)	1/19 (5.26%)	
Chemo				
geen	n/N (%)	1/20 (5.00%)	6/19 (31.58%)	0.073
neo-adjuvante	n/N (%)	10/20 (50.00%)	6/19 (31.58%)	
adjuvante	n/N (%)	8/20 (40.00%)	4/19 (21.05%)	
neo-adjuvant + adjuvant	n/N (%)	1/20 (5.00%)	3/19 (15.79%)	
Taxanes				
0	n/N (%)	4/20 (20.00%)	6/19 (31.58%)	0.480
1	n/N (%)	16/20 (80.00%)	13/19 (68.42%)	

Variables presented with percentages are analysed using a Fishers Exact test. Variables summarized by means, medians,... are analysed using a Mann-Whitney U test. All reported p-values are two-sided

Variable	Statistic	Control	Treatment	P-value
Hormone therapy				
geen	n/N (%)	3/20 (15.00%)	4/19 (21.05%)	0.542
post-operatief	n/N (%)	17/20 (85.00%)	14/19 (73.68%)	
pre- en post-operatief	n/N (%)	0/20 (0.00%)	1/19 (5.26%)	

Variables presented with percentages are analysed using a Fishers Exact test. Variables summarized by means, medians,... are analysed using a Mann-Whitney U test. All reported p-values are two-sided

Baseline info at time of randomization

Variable	Statistic	Control	Treatment
Month of randomization			
1	n/N (%)	2/20 (10.00%)	4/19 (21.05%)
3	n/N (%)	7/20 (35.00%)	8/19 (42.11%)
6	n/N (%)	6/20 (30.00%)	5/19 (26.32%)
9	n/N (%)	3/20 (15.00%)	1/19 (5.26%)
12	n/N (%)	1/20 (5.00%)	1/19 (5.26%)
18	n/N (%)	1/20 (5.00%)	0/19 (0.00%)
lymphedema			
No	n/N (%)	14/20 (70.00%)	10/19 (52.63%)
Yes	n/N (%)	6/20 (30.00%)	9/19 (47.37%)
DB score	N	20	18
	Mean	4.15	5.17
	Std	1.872	4.842
	Median	4.00	4.00
	IQR	(2.50; 5.50)	(2.00; 6.00)
	Range	(1.00; 8.00)	(1.00; 19.00)
pitting			
No	n/N (%)	14/20 (70.00%)	12/19 (63.16%)
Yes	n/N (%)	6/20 (30.00%)	7/19 (36.84%)
stemmer			
No	n/N (%)	11/20 (55.00%)	10/19 (52.63%)
Yes	n/N (%)	9/20 (45.00%)	9/19 (47.37%)
ECF cutoff 10			
Below	n/N (%)	7/12 (58.33%)	5/12 (41.67%)
Above	n/N (%)	5/12 (41.67%)	7/12 (58.33%)
ECF cutoff 7			
Below	n/N (%)	6/12 (50.00%)	4/12 (33.33%)
Above	n/N (%)	6/12 (50.00%)	8/12 (66.67%)
MM			
Below	n/N (%)	6/19 (31.58%)	4/19 (21.05%)
Above	n/N (%)	13/19 (68.42%)	15/19 (78.95%)

Variable	Statistic	Control	Treatment
Vol%_B	N	20	19
	Mean	2.87	5.22
	Std	4.272	6.252
	Median	3.26	3.78
	IQR	(0.95; 5.68)	(0.85; 8.75)
	Range	(-6.72; 12.14)	(-3.42; 25.60)
TotSclymph ICF	N	18	14
	Mean	18.90	17.45
	Std	17.739	12.274
	Median	11.27	17.74
	IQR	(6.54; 39.17)	(8.46; 24.17)
	Range	(0.00; 48.93)	(0.74; 48.33)
FysFuSc	N	18	14
	Mean	17.53	22.67
	Std	16.506	19.509
	Median	11.43	14.29
	IQR	(7.14; 21.43)	(7.14; 40.00)
	Range	(0.00; 55.71)	(0.00; 59.00)
MentFySc	N	18	14
	Mean	11.94	10.54
	Std	20.065	13.629
	Median	2.50	5.00
	IQR	(0.00; 12.50)	(0.00; 20.00)
	Range	(0.00; 70.00)	(0.00; 42.50)
HuishSc	N	18	13
	Mean	18.84	11.73
	Std	18.568	13.979
	Median	15.83	3.33
	IQR	(0.00; 27.50)	(0.00; 20.00)
	Range	(0.00; 55.00)	(0.00; 36.67)

Variable	Statistic	Control	Treatment
MobSc	N	18	14
	Mean	22.12	26.67
	Std	20.142	26.629
	Median	12.26	18.81
	IQR	(5.71; 34.29)	(10.00; 37.14)
	Range	(0.00; 67.50)	(0.00; 85.00)
SocSc	N	18	14
	Mean	22.64	10.79
	Std	23.826	11.231
	Median	15.83	7.00
	IQR	(0.00; 40.00)	(0.00; 20.00)
	Range	(0.00; 68.33)	(0.00; 33.33)
TotScore_MQoL	N	19	16
	Mean	6.56	6.82
	Std	2.720	2.822
	Median	7.43	7.43
	IQR	(5.35; 8.40)	(6.81; 8.39)
	Range	(0.00; 9.62)	(0.00; 10.00)

Descriptives outcomes at 6 months

Variable	Statistic	Control	Treatment
lymphedema			
No	n/N (%)	6/8 (75.00%)	4/11 (36.36%)
Yes	n/N (%)	2/8 (25.00%)	7/11 (63.64%)
evolution DB			
No	n/N (%)	5/8 (62.50%)	2/10 (20.00%)
Yes	n/N (%)	3/8 (37.50%)	8/10 (80.00%)
pitting			
No	n/N (%)	7/8 (87.50%)	7/9 (77.78%)
Yes	n/N (%)	1/8 (12.50%)	2/9 (22.22%)
stemmer			
No	n/N (%)	2/8 (25.00%)	2/9 (22.22%)
Yes	n/N (%)	6/8 (75.00%)	7/9 (77.78%)
ECF cutoff 10			
Below	n/N (%)	6/6 (100.00%)	2/6 (33.33%)
Above	n/N (%)	0/6 (0.00%)	4/6 (66.67%)
ECF cutoff 7			
Below	n/N (%)	5/6 (83.33%)	2/6 (33.33%)
Above	n/N (%)	1/6 (16.67%)	4/6 (66.67%)
MM			
Below	n/N (%)	4/8 (50.00%)	1/9 (11.11%)
Above	n/N (%)	4/8 (50.00%)	8/9 (88.89%)
Vol%_B	N	8	11
	Mean	1.83	6.08
	Std	3.738	5.256
	Median	2.34	5.69
	IQR	(-0.14; 4.02)	(1.54; 8.45)
	Range	(-5.05; 7.29)	(-0.63; 18.44)

Variable	Statistic	Control	Treatment
TotSclymph ICF	N	5	7
	Mean	31.88	8.98
	Std	22.332	6.301
	Median	34.35	7.06
	IQR	(13.93; 42.50)	(4.62; 13.60)
	Range	(6.55; 62.08)	(1.85; 20.69)
FysFuSc	N	5	7
	Mean	30.57	13.06
	Std	18.533	14.224
	Median	25.71	12.86
	IQR	(18.57; 42.86)	(1.43; 18.57)
	Range	(10.00; 55.71)	(0.00; 40.00)
MentFySc	N	5	7
	Mean	25.00	2.14
	Std	28.886	3.934
	Median	17.50	0.00
	IQR	(15.00; 17.50)	(0.00; 5.00)
	Range	(0.00; 75.00)	(0.00; 10.00)
HuishSc	N	5	7
	Mean	30.00	5.00
	Std	23.519	7.638
	Median	40.00	0.00
	IQR	(10.00; 47.50)	(0.00; 10.00)
	Range	(0.00; 52.50)	(0.00; 20.00)
MobSc	N	5	7
	Mean	37.45	14.27
	Std	28.510	16.845
	Median	50.00	10.00
	IQR	(11.43; 58.33)	(3.33; 17.50)
	Range	(2.50; 65.00)	(0.00; 50.00)

Variable	Statistic	Control	Treatment
SocSc	N	5	7
	Mean	34.67	7.33
	Std	21.679	12.347
	Median	36.67	0.00
	IQR	(20.00; 40.00)	(0.00; 12.00)
	Range	(10.00; 66.67)	(0.00; 33.33)
TotScore_MQoL	N	7	8
	Mean	4.56	6.23
	Std	3.804	3.925
	Median	7.23	7.62
	IQR	(0.00; 7.52)	(3.74; 8.83)
	Range	(0.00; 8.08)	(0.00; 9.47)

Descriptives outcomes at 12 months

Variable	Statistic	Control	Treatment
lymphedema			
No	n/N (%)	9/13 (69.23%)	7/13 (53.85%)
Yes	n/N (%)	4/13 (30.77%)	6/13 (46.15%)
evolution DB			
No	n/N (%)	6/13 (46.15%)	7/13 (53.85%)
Yes	n/N (%)	7/13 (53.85%)	6/13 (46.15%)
pitting			
No	n/N (%)	9/13 (69.23%)	7/13 (53.85%)
Yes	n/N (%)	4/13 (30.77%)	6/13 (46.15%)
stemmer			
No	n/N (%)	3/13 (23.08%)	1/13 (7.69%)
Yes	n/N (%)	10/13 (76.92%)	12/13 (92.31%)
ECF cutoff 10			
Below	n/N (%)	8/9 (88.89%)	6/10 (60.00%)
Above	n/N (%)	1/9 (11.11%)	4/10 (40.00%)
ECF cutoff 7			
Below	n/N (%)	7/9 (77.78%)	4/10 (40.00%)
Above	n/N (%)	2/9 (22.22%)	6/10 (60.00%)
MM			
Below	n/N (%)	5/12 (41.67%)	1/13 (7.69%)
Above	n/N (%)	7/12 (58.33%)	12/13 (92.31%)
Vol%_B	N	13	13
	Mean	2.77	6.62
	Std	2.926	7.538
	Median	2.15	3.77
	IQR	(0.89; 5.43)	(0.99; 9.16)
	Range	(-2.79; 8.15)	(-1.21; 26.54)

Variable	Statistic	Control	Treatment
TotSclymph ICF	N	11	13
	Mean	28.07	18.91
	Std	19.871	16.036
	Median	31.33	20.69
	IQR	(8.15; 37.24)	(6.40; 30.77)
	Range	(0.69; 70.00)	(0.00; 53.04)
FysFuSc	N	11	13
	Mean	30.78	17.58
	Std	21.950	18.911
	Median	22.86	10.00
	IQR	(15.71; 50.00)	(1.43; 32.86)
	Range	(0.00; 68.57)	(0.00; 58.57)
MentFySc	N	11	13
	Mean	22.50	4.23
	Std	25.150	6.951
	Median	15.00	0.00
	IQR	(0.00; 50.00)	(0.00; 10.00)
	Range	(0.00; 67.50)	(0.00; 20.00)
HuishSc	N	11	13
	Mean	29.32	11.67
	Std	26.765	18.044
	Median	30.00	2.50
	IQR	(0.00; 50.00)	(0.00; 10.00)
	Range	(0.00; 75.00)	(0.00; 53.33)
MobSc	N	10	13
	Mean	32.64	27.71
	Std	22.966	21.373
	Median	38.75	28.57
	IQR	(8.57; 43.75)	(5.00; 37.14)
	Range	(0.00; 75.71)	(0.00; 65.00)

Variable	Statistic	Control	Treatment
SocSc	N	10	13
	Mean	21.32	30.03
	Std	23.318	33.526
	Median	17.50	26.00
	IQR	(0.00; 36.00)	(0.00; 33.33)
	Range	(0.00; 68.00)	(0.00; 86.67)
TotScore_MQoL	N	12	13
	Mean	5.98	7.62
	Std	3.267	1.643
	Median	7.32	8.13
	IQR	(4.38; 8.26)	(7.03; 8.47)
	Range	(0.00; 9.35)	(4.80; 10.00)

Descriptives outcomes at 18 months

Variable	Statistic	Control	Treatment
lymphedema			
No	n/N (%)	9/11 (81.82%)	7/10 (70.00%)
Yes	n/N (%)	2/11 (18.18%)	3/10 (30.00%)
evolution DB			
No	n/N (%)	6/11 (54.55%)	5/10 (50.00%)
Yes	n/N (%)	5/11 (45.45%)	5/10 (50.00%)
pitting			
No	n/N (%)	9/11 (81.82%)	4/10 (40.00%)
Yes	n/N (%)	2/11 (18.18%)	6/10 (60.00%)
stemmer			
No	n/N (%)	5/11 (45.45%)	1/10 (10.00%)
Yes	n/N (%)	6/11 (54.55%)	9/10 (90.00%)
ECF cutoff 10			
Below	n/N (%)	8/9 (88.89%)	6/8 (75.00%)
Above	n/N (%)	1/9 (11.11%)	2/8 (25.00%)
ECF cutoff 7			
Below	n/N (%)	7/9 (77.78%)	5/8 (62.50%)
Above	n/N (%)	2/9 (22.22%)	3/8 (37.50%)
MM			
Below	n/N (%)	5/10 (50.00%)	3/10 (30.00%)
Above	n/N (%)	5/10 (50.00%)	7/10 (70.00%)
Vol%_B	N	11	10
	Mean	1.61	3.03
	Std	2.902	4.495
	Median	1.55	2.35
	IQR	(-0.37; 4.01)	(-0.15; 7.07)
	Range	(-2.95; 6.06)	(-2.43; 11.01)

Variable	Statistic	Control	Treatment
TotSclymph ICF	N	10	9
	Mean	21.96	19.85
	Std	19.893	14.979
	Median	16.77	15.00
	IQR	(3.21; 37.04)	(13.33; 21.67)
	Range	(1.79; 54.78)	(0.77; 52.08)
FysFuSc	N	10	9
	Mean	23.71	20.93
	Std	17.615	15.224
	Median	20.00	21.43
	IQR	(8.57; 35.71)	(11.43; 32.86)
	Range	(4.29; 52.86)	(0.00; 45.00)
MentFySc	N	10	9
	Mean	13.75	12.50
	Std	17.490	16.008
	Median	6.25	10.00
	IQR	(0.00; 35.00)	(0.00; 15.00)
	Range	(0.00; 42.50)	(0.00; 50.00)
HuishSc	N	10	9
	Mean	24.58	19.07
	Std	24.140	17.586
	Median	19.17	20.00
	IQR	(0.00; 45.00)	(2.50; 26.67)
	Range	(0.00; 62.50)	(0.00; 50.00)
MobSc	N	10	9
	Mean	25.21	26.75
	Std	24.828	19.437
	Median	26.34	18.75
	IQR	(1.25; 40.00)	(16.25; 35.71)
	Range	(0.00; 68.57)	(1.43; 61.43)

Variable	Statistic	Control	Treatment
SocSc	N	10	9
	Mean	17.23	18.20
	Std	18.715	24.111
	Median	10.83	13.33
	IQR	(0.00; 38.33)	(0.00; 20.00)
	Range	(0.00; 44.00)	(0.00; 77.50)
TotScore_MQoL	N	10	9
	Mean	6.67	7.28
	Std	3.215	1.353
	Median	7.54	7.20
	IQR	(5.02; 9.13)	(7.05; 8.03)
	Range	(0.00; 9.87)	(4.73; 9.65)

Descriptives outcomes at 24 months

Variable	Statistic	Control	Treatment
lymphedema			
No	n/N (%)	12/12 (100.00%)	8/10 (80.00%)
Yes	n/N (%)	0/12 (0.00%)	2/10 (20.00%)
evolution DB			
No	n/N (%)	8/12 (66.67%)	3/10 (30.00%)
Yes	n/N (%)	4/12 (33.33%)	7/10 (70.00%)
pitting			
No	n/N (%)	11/12 (91.67%)	10/10 (100.00%)
Yes	n/N (%)	1/12 (8.33%)	0/10 (0.00%)
stemmer			
No	n/N (%)	7/12 (58.33%)	5/10 (50.00%)
Yes	n/N (%)	5/12 (41.67%)	5/10 (50.00%)
ECF cutoff 10			
Below	n/N (%)	6/9 (66.67%)	6/8 (75.00%)
Above	n/N (%)	3/9 (33.33%)	2/8 (25.00%)
ECF cutoff 7			
Below	n/N (%)	6/9 (66.67%)	5/8 (62.50%)
Above	n/N (%)	3/9 (33.33%)	3/8 (37.50%)
MM			
Below	n/N (%)	7/11 (63.64%)	4/10 (40.00%)
Above	n/N (%)	4/11 (36.36%)	6/10 (60.00%)
Vol%_B	N	12	10
	Mean	0.41	2.37
	Std	3.695	2.943
	Median	0.80	2.78
	IQR	(-0.54; 3.47)	(1.33; 4.50)
	Range	(-6.73; 4.60)	(-3.80; 5.84)

Variable	Statistic	Control	Treatment
TotSclymph ICF	N	11	9
	Mean	26.27	16.44
	Std	19.162	11.193
	Median	32.41	10.00
	IQR	(2.86; 46.07)	(9.20; 21.85)
	Range	(0.00; 47.08)	(3.33; 36.79)
FysFuSc	N	11	9
	Mean	22.34	20.63
	Std	19.286	18.043
	Median	15.71	15.71
	IQR	(4.29; 37.14)	(11.43; 27.14)
	Range	(0.00; 55.71)	(0.00; 54.29)
MentFySc	N	11	10
	Mean	15.00	7.25
	Std	15.930	14.741
	Median	10.00	0.00
	IQR	(0.00; 32.50)	(0.00; 7.50)
	Range	(0.00; 40.00)	(0.00; 45.00)
HuishSc	N	11	9
	Mean	31.21	14.72
	Std	24.416	18.893
	Median	37.50	10.00
	IQR	(5.00; 50.00)	(0.00; 25.00)
	Range	(0.00; 70.00)	(0.00; 55.00)
MobSc	N	11	9
	Mean	36.55	20.59
	Std	28.398	16.524
	Median	44.29	15.71
	IQR	(4.29; 63.33)	(7.14; 35.71)
	Range	(0.00; 80.00)	(5.00; 50.00)

Variable	Statistic	Control	Treatment
SocSc	N	11	10
	Mean	22.21	19.28
	Std	18.516	29.739
	Median	20.00	12.67
	IQR	(8.33; 40.00)	(0.00; 20.00)
	Range	(0.00; 56.00)	(0.00; 100.00)
TotScore_MQoL	N	11	10
	Mean	6.78	7.88
	Std	2.810	1.510
	Median	6.83	7.95
	IQR	(5.68; 9.04)	(7.23; 9.23)
	Range	(0.00; 9.77)	(4.83; 9.93)

Descriptives outcomes at 36 months

Variable	Statistic	Control	Treatment
lymphedema			
No	n/N (%)	10/10 (100.00%)	4/7 (57.14%)
Yes	n/N (%)	0/10 (0.00%)	3/7 (42.86%)
evolution DB			
No	n/N (%)	6/10 (60.00%)	2/7 (28.57%)
Yes	n/N (%)	4/10 (40.00%)	5/7 (71.43%)
pitting			
No	n/N (%)	8/10 (80.00%)	6/7 (85.71%)
Yes	n/N (%)	2/10 (20.00%)	1/7 (14.29%)
stemmer			
No	n/N (%)	6/10 (60.00%)	3/7 (42.86%)
Yes	n/N (%)	4/10 (40.00%)	4/7 (57.14%)
ECF cutoff 10			
Below	n/N (%)	8/8 (100.00%)	4/7 (57.14%)
Above	n/N (%)	0/8 (0.00%)	3/7 (42.86%)
ECF cutoff 7			
Below	n/N (%)	6/8 (75.00%)	4/7 (57.14%)
Above	n/N (%)	2/8 (25.00%)	3/7 (42.86%)
MM			
Below	n/N (%)	6/9 (66.67%)	2/7 (28.57%)
Above	n/N (%)	3/9 (33.33%)	5/7 (71.43%)
Vol%_B	N	10	7
	Mean	-0.08	4.97
	Std	3.956	5.308
	Median	0.75	3.20
	IQR	(-2.50; 3.22)	(2.22; 7.19)
	Range	(-8.32; 4.48)	(-2.35; 14.63)

Variable	Statistic	Control	Treatment
TotSclymph ICF	N	9	7
	Mean	26.94	21.32
	Std	19.728	10.277
	Median	32.61	21.67
	IQR	(5.52; 36.92)	(12.61; 31.20)
	Range	(2.69; 55.93)	(4.14; 31.72)
FysFuSc	N	9	7
	Mean	28.57	24.49
	Std	24.244	21.937
	Median	22.86	18.57
	IQR	(7.14; 40.00)	(7.14; 37.14)
	Range	(0.00; 68.57)	(2.86; 67.14)
MentFySc	N	9	7
	Mean	8.61	10.00
	Std	12.318	17.321
	Median	0.00	0.00
	IQR	(0.00; 12.50)	(0.00; 30.00)
	Range	(0.00; 35.00)	(0.00; 40.00)
HuishSc	N	9	7
	Mean	33.15	20.83
	Std	22.059	15.023
	Median	40.00	25.00
	IQR	(15.00; 50.00)	(0.00; 33.33)
	Range	(0.00; 62.50)	(0.00; 37.50)
MobSc	N	9	7
	Mean	32.74	27.24
	Std	22.099	15.770
	Median	38.57	18.75
	IQR	(8.57; 45.00)	(16.67; 45.71)
	Range	(5.71; 62.86)	(8.75; 50.00)

Variable	Statistic	Control	Treatment
SocSc	N	9	7
	Mean	28.33	20.24
	Std	21.731	10.989
	Median	30.00	25.00
	IQR	(7.50; 40.00)	(13.33; 30.00)
	Range	(0.00; 58.00)	(0.00; 30.00)
TotScore_MQoL	N	10	7
	Mean	6.00	7.01
	Std	2.790	1.585
	Median	6.68	7.15
	IQR	(5.18; 7.45)	(5.97; 7.85)
	Range	(0.00; 9.67)	(4.45; 9.53)

Lymphedema cumulative over 36 months

Variable	Statistic	Control	Treatment
Lymphedema (cumulative)			
0	n/N (%)	6/14 (42.86%)	1/10 (10.00%)
1	n/N (%)	8/14 (57.14%)	9/10 (90.00%)

Lymphedema cumulative over 36 months: ONBEKEND VOOR VOLGENDE PATIENTEN

Volg	arm
22	Treatment
42	Control
52	Treatment
59	Control
60	Control
65	Treatment
73	Control
77	Treatment
86	Control
90	Treatment
116	Treatment
123	Treatment
126	Treatment
127	Control
128	Treatment

Compliance in the intervention arm

Variable	Statistic	Treatment
Compliantie		
No	n/N (%)	14/19 (73.68%)
Yes	n/N (%)	5/19 (26.32%)
aantal dagen/week kous gedragen	N	19
	Mean	4.11
	Std	2.233
	Median	5.00
	IQR	(2.00; 5.00)
	Range	(0.00; 7.00)
aantal uren/dag kous gedragen	N	19
	Mean	7.68
	Std	3.888
	Median	8.00
	IQR	(5.00; 12.00)
	Range	(0.00; 16.00)

2. PRIMARY OUTCOME ANALYSIS

Result in the table below show non-significant increased odds of both lymphedema and worsened dermal backflow in the treatment group compared to control. Hence, no evidence is found for improved outcome in the preventive treatment group.

Results table primary outcome analysis

Outcome	Odds Ratio (95% CI)	P-value
Lymphedema	2.032 (0.508;8.125)	0.3160
Evolution dermal backflow	1.957 (0.590;6.493)	0.2723

OR: odds ratio, CI: confidence interval

OR>(<)1: higher (lower) risk of Lymphedema/worsening DB in intervention arm compared to control

2.1. Sensitivity analysis: correction for baseline differences

Despite of randomization, a difference was seen between both intervention groups with respect to age and number of positive lymph nodes. In this section, the primary analysis is repeated with correction for both variables.

Results table sensitivity analysis

Outcome	Odds Ratio (95% CI)	P-value
Lymphedema	1.911 (0.497;7.357)	0.3462
Evolution dermal backflow	4.176 (1.440;12.116)	0.0085

OR: odds ratio, CI: confidence interval
OR>(<)1: higher (lower) risk of Lymphedema/worsening DB in intervention arm compared to control

2.2. Per protocol analysis

The primary analysis is repeated on the per protocol set: i.e. non-compliant patients in the intervention arm are excluded.

Results table primary outcome analysis

Outcome	Odds Ratio (95% CI)	P-value
Lymphedema	1.594 (0.095;26.674)	0.7458
Evolution dermal backflow	1.575 (0.347;7.150)	0.5562

OR: odds ratio, CI: confidence interval
OR>(<)1: higher (lower) risk of Lymphedema/worsening DB in intervention arm compared to control

3. SECONDARY OUTCOME ANALYSIS

Results table binary secondary outcomes

Outcome	Odds Ratio (95% CI)	P-value
Pitting Yes	2.365 (0.791;7.072)	0.1236
Stemmer Yes	2.058 (0.659;6.427)	0.2141
ECF > cutoff 10	3.108 (0.904;10.692)	0.0720
ECF > cutoff 7	1.682 (0.563;5.024)	0.3515
MM >= cutoff 1.2	4.171 (1.225;14.199)	0.0223

OR: odds ratio, CI: confidence interval
OR>(<)1: higher (lower) risk of adverse outcome in intervention arm compared to control

Results table continuous secondary outcomes

Outcome	Mean difference (95% CI)	P-value
Vol%_B	2.324 (-0.309;4.956)	0.0813
TotSclymph_ICF	-6.879 (-16.94;3.186)	0.1688
FysFuSc	-11.06 (-20.39;-1.725)	0.0227
MentFySc	-6.656 (-17.88;4.564)	0.2295
HuishSc	-8.042 (-16.95;0.870)	0.0743
MobSc	2.958 (-5.133;11.049)	0.4535
SocSc	-5.784 (-20.47;8.899)	0.4199
TotScore_MQoL	0.969 (-0.366;2.305)	0.1469

CI: confidence interval
Mean difference>(<)0: higher (lower) score in intervention arm compared to control

Long-term follow-up

Long-term follow up was performed around 2 years. Status praesens was measured as (1) no lymphedema, (2) lymphedema without compression garment, (3) lymphedema with compression garment.
We estimate the long-term treatment effect on:
- use of compression garment (3 vs 1+2)
- lymphedema (2+3 vs 1)
Analysis is performed using a Fisher exact test.

Results table

Variable	Statistic	Control	Treatment	P-value
Status praesens				
no lymphedema	n/N (%)	14/20 (70.00%)	3/19 (15.79%)	0.003
lymphedema without compression garment	n/N (%)	3/20 (15.00%)	6/19 (31.58%)	
lymphedema with compression garment	n/N (%)	3/20 (15.00%)	10/19 (52.63%)	
use of compression garment				
No	n/N (%)	17/20 (85.00%)	9/19 (47.37%)	0.019
Yes	n/N (%)	3/20 (15.00%)	10/19 (52.63%)	
lymphedema (with or without compression garment)				
No	n/N (%)	14/20 (70.00%)	3/19 (15.79%)	0.001
Yes	n/N (%)	6/20 (30.00%)	16/19 (84.21%)	

Variables presented with percentages are analysed using a Fishers Exact test. Variables summarized by means, medians,... are analysed using a Mann-Whitney U test. All reported p-values are two-sided

4. EXPLORATORY ANALYSIS

4.1. Effect of compliance on outcome in the intervention group

We estimate the effect of compliance on the primary endpoints. Compliance is expressed as:
- binary (Yes vs No)
- continuous as the number of days per week
- continuous as the number of hours per day
- continuous as the total number of hours (number of days/week multiplied by number of hours/day)

Effect of compliance (Yes vs No)

Outcome	Odds Ratio (95% CI)	P-value
Lymphedema	0.939 (0.120;7.369)	0.9523
Evolution dermal backflow	1.430 (0.307;6.655)	0.6485

OR: odds ratio, CI: confidence interval
OR>(<)1: higher (lower) risk of Lymphedema/worsening DB for compliant vs non-compliant patients

Effect of number of days per week

Outcome	Odds Ratio (95% CI)	P-value
Lymphedema	0.808 (0.590;1.107)	0.1842
Evolution dermal backflow	1.085 (0.781;1.507)	0.6274

OR: odds ratio, CI: confidence interval
OR>(<)1: higher (lower) risk of Lymphedema/worsening DB for higher number of days per week

Effect of number of hours per day

Outcome	Odds Ratio (95% CI)	P-value
Lymphedema	0.964 (0.791;1.175)	0.7176
Evolution dermal backflow	1.025 (0.875;1.200)	0.7619

OR: odds ratio, CI: confidence interval
OR>(<)1: higher (lower) risk of Lymphedema/worsening DB for higher number of hours per day

Effect of number of hours per day

Outcome	Odds Ratio (95% CI)	P-value
Lymphedema	0.988 (0.967;1.009)	0.2656
Evolution dermal backflow	1.006 (0.988;1.025)	0.5197

OR: odds ratio, CI: confidence interval
OR>(<)1: higher (lower) risk of Lymphedema/worsening DB for higher number of hours per day