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SHOCK WAVE THERAPY PLUS ECCENTRIC STRENGTHENING VERSUS ISOLATED ECCENTRIC STRENGTHENING FOR ACHILLES INSERTIONAL TENDINOPATHY. A DOUBLE-BLINDED RANDOMIZED CLINICAL TRIAL.

APPENDIX 1

VISA-A		Mean	SD	N	CI	p-value
Pre	CON	40.6	21.1	61	35.3 to 45.9	0.420
	SWT	43.9	23.2	58	37.9 to 49.9	
2 weeks	CON	47.6	19.8	57	42.5 to 52.7	0.326
	SWT	43.8	21.3	54	38.1 to 49.5	
4 weeks	CON	52.9	20.6	58	47.6 to 58.2	0.489
	SWT	50.2	19.6	50	44.8 to 55.6	
6 weeks	CON	54.8	19.4	45	49.1 to 60.5	0.199
	SWT	49.3	21.2	46	43.2 to 55.4	
12 weeks	CON	61.8	23.2	42	54.8 to 68.8	0.114
	SWT	53.7	22.0	39	46.8 to 60.6	
24 weeks	CON	62.3	25.1	51	55.4 to 69.2	0.876
	SWT	63.2	27.5	45	55.2 to 71.2	

Table 3: Group comparison by time for the VISA-A.

VISA-A: Victorian Institute of Sport Assessment – Achilles. CON: control group. SWT: shockwave therapy group. SD: standard deviation. N: number of subjects. CI: 95% confidence interval.

VAS		Mean	SD	N	CI	p-value
Pre	CON	5.62	2.18	61	5.07 to 6.17	0.862
	SWT	5.69	2.11	58	5.15 to 6.23	
2 weeks	CON	4.85	2.12	59	4.31 to 5.39	0.843
	SWT	4.77	2.28	55	4.17 to 5.37	
4 weeks	CON	4.17	2.11	58	3.63 to 4.71	0.910
	SWT	4.11	2.61	50	3.39 to 4.83	
6 weeks	CON	3.61	2.12	45	2.99 to 4.23	0.809
	SWT	3.41	2.48	45	2.68 to 4.14	
12 weeks	CON	2.89	2.21	43	2.23 to 3.55	0.228
	SWT	3.52	2.45	39	2.75 to 4.29	
24 weeks	CON	2.46	2.23	51	1.85 to 3.07	0.623
	SWT	2.71	2.77	45	1.9 to 3.52	

Table 4: Group comparison by time for the VAS.

VAS: visual analogic scale. CON: control group. SWT: shockwave therapy group. SD: standard deviation. N: number of subjects. CI: 95% confidence interval.

	AOFAS	Mean	SD	N	CI	p-value
Pre	CON	64.7	13.4	61	61.3 to 68.1	0.828
	SWT	64.1	15.0	58	60.2 to 68	
2 weeks	CON	70.3	13.5	58	66.8 to 73.8	0.547
	SWT	71.7	11.7	54	68.6 to 74.8	
4 weeks	CON	74.3	12.3	58	71.1 to 77.5	0.629
	SWT	73.1	12.0	50	69.8 to 76.4	
6 weeks	CON	77.4	11.9	45	73.9 to 80.9	0.838
	SWT	77.9	13.0	46	74.2 to 81.6	
12 weeks	CON	80.1	12.8	43	76.3 to 83.9	0.109
	SWT	75.4	13.7	39	71.1 to 79.7	
24 weeks	CON	82.0	15.6	51	77.3 to 86.3	0.504
	SWT	79.7	17.9	45	74.5 to 84.9	

Table 5: Group comparison by time for the AOFAS score.

AOFAS: American Orthopedics Foot and Ankle Society score. CON: control group. SWT: shockwave therapy group. SD: standard deviation. N: number of subjects. CI: 95% confidence interval.

SF12-PCS		Mean	SD	N	CI	p-value
Pre	CON	37.9	9.0	60	35.6 to 40.2	0.226
	SWT	39.9	8.8	58	37.6 to 42.2	
2 weeks	CON	40.3	9.2	58	37.9 to 42.7	0.691
	SWT	39.6	8.8	53	37.2 to 42	
4 weeks	CON	42.4	8.2	56	40.2 to 44.6	0.558
	SWT	41.5	7.8	49	39.3 to 43.7	
6 weeks	CON	43.1	8.5	44	40.6 to 45.6	0.655
	SWT	42.3	8.1	47	40 to 44.6	
12 weeks	CON	43.3	8.6	42	40.7 to 45.9	0.619
	SWT	42.3	8.7	39	39.6 to 45	
24 weeks	CON	44.2	8.8	51	41.8 to 46.6	0.748
	SWT	43.6	9.7	45	40.8 to 46.4	

Table 6: Group comparison by time for the SF12-PCS.

SF12-PCS: 12-item Short Form Health Survey – Physical Component Score. CON: control group. SWT: shockwave therapy group. SD: standard deviation. N: number of subjects. CI: 95% confidence interval.

SF12-MCS		Mean	SD	N	CI	p-value
Pre	CON	47.3	11.0	60	44.5 to 50.1	0.947
	SWT	47.4	10.8	58	44.6 to 50.2	
2 weeks	CON	48.4	10.2	58	45.8 to 51	0.561
	SWT	49.5	10.2	53	46.7 to 52.3	
4 weeks	CON	49.2	9.4	56	46.7 to 51.7	0.885
	SWT	49.5	10.0	49	46.7 to 52.3	
6 weeks	CON	49.8	8.3	44	47.4 to 52.2	0.850
	SWT	50.2	11.1	47	47 to 53.4	
12 weeks	CON	49.6	9.5	42	46.7 to 52.5	0.335
	SWT	51.5	8.4	39	48.9 to 54.1	
24 weeks	CON	50.0	10.7	51	47.1 to 52.9	0.396
	SWT	51.8	9.6	45	49 to 54.6	

Table 7: Group comparison by time for the SF12-MCS.

SF12-MCS: 12-item Short Form Health Survey – Mental Component Score. CON: control group. SWT: shockwave therapy group. SD: standard deviation. N: number of subjects. CI: 95% confidence interval.

Algometry		Mean	SD	N	CI	p-value
Pre	CON	2.82	1.21	52	2.49 to 3.15	0,455
	SWT	2.63	1.40	52	2.25 to 3.01	
2 weeks	CON	2.93	1.79	53	2.45 to 3.41	0.362
	SWT	2.63	1.55	51	2.2 to 3.06	
4 weeks	CON	2.88	1.55	53	2.46 to 3.3	0.386
	SWT	2.61	1.54	44	2.16 to 3.06	
6 weeks	CON	3.04	1.43	43	2.61 to 3.47	0.406
	SWT	2.81	1.13	41	2.46 to 3.16	
12 weeks	CON	3.61	2.13	42	2.96 to 4.26	0.114
	SWT	2.96	1.36	38	2.53 to 3.39	
24 weeks	CON	4.15	2.26	51	3.53 to 4.77	0.895
	SWT	4.22	2.29	45	3.55 to 4.89	

Table 8: Group comparison by time for Algometry Pain Threshold.

CON: control group. SWT: shockwave therapy group. SD: standard deviation. N: number of subjects.

CI: 95% confidence interval.

VAS (3kg/f)		Mean	SD	N	CI	p-value
Pre	CON	5.93	2.15	51	5.34 to 6.52	0.771
	SWT	5.79	2.45	51	5.12 to 6.46	
2 weeks	CON	5.20	2.44	51	4.53 to 5.87	0.582
	SWT	5.47	2.40	51	4.81 to 6.13	
4 weeks	CON	4.95	2.59	52	4.25 to 5.65	0.570
	SWT	4.65	2.56	44	3.89 to 5.41	
6 weeks	CON	4.69	2.47	41	3.93 to 5.45	0.749
	SWT	4.50	2.82	41	3.64 to 5.36	
12 weeks	CON	4.16	2.73	42	3.33 to 4.99	0.857
	SWT	4.27	2.74	37	3.39 to 5.15	
24 weeks	CON	3.71	3.07	51	2.87 to 4.55	0.321
	SWT	3.11	2.79	45	2.29 to 3.93	

Table 9: Group comparison by time for VAS with 3kg/f at Algometry.

VAS: visual analogic scale. CON: control group. SWT: shockwave therapy group. SD: standard deviation. N: number of subjects. CI: 95% confidence interval. Kg/f: kilogram/force.

FAOS		Mean	SD	N	CI	p-value
Pre	CON	52.3	18.8	44	46.7 to 57.9	0.566
	SWT	50.0	18.1	44	44.6 to 55.4	
2 weeks	CON	56.0	18.7	42	50.3 to 61.7	0.837
	SWT	55.1	19.5	42	49.2 to 61	
4 weeks	CON	64.5	17.7	39	58.9 to 70.1	0.216
	SWT	59.5	18.2	39	53.8 to 65.2	
6 weeks	CON	66.5	17.9	33	60.4 to 72.6	0.720
	SWT	64.9	18.3	37	59 to 70.8	
12 weeks	CON	72.2	17.7	35	66.3 to 78.1	0.064
	SWT	63.6	19.1	31	56.9 to 70.3	
24 weeks	CON	76.5	19.8	43	70.6 to 82.4	0.433
	SWT	72.9	21.8	40	66.2 to 79.6	

Table 10: Group comparison by time for FAOS.

FAOS: Foot and Ankle Outcome Score. CON: control group. SWT: shockwave therapy group. SD: standard deviation. N: number of subjects. CI: 95% confidence interval. Kg/f: kilogram/force.

CON	BMI		Age		Symptoms	
	Corr (r)	p-value	Corr (r)	p-value	Corr (r)	p-value
VISA-A	0,149	0,297	0,074	0,605	0,059	0,688
VAS	-0,135	0,346	0,044	0,762	0,103	0,483
AOFAS	0,374	0,007	0,068	0,636	-0,174	0,231
SF12-PCS	0,146	0,313	0,051	0,724	0,015	0,922
SF12-MCS	0,067	0,645	0,028	0,847	-0,001	0,995
Algometry	-0,286	0,063	-0,018	0,907	-0,214	0,173
VAS (3kg/f)	0,144	0,362	0,186	0,237	0,102	0,527
FAOS	0,100	0,567	0,207	0,234	-0,221	0,209

Table 11: Correlation between variables delta with group CON.

BMI: body mass index. CON: control group. Corr: Pearson's correlation. VISA-A: Victorian Institute of Sport Assessment – Achilles. VAS: visual analogic scale AOFAS: American Orthopedics Foot and Ankle Society score SF12-PCS: 12-item Short Form Health Survey – Physical Component Score SF12-MCS: 12-item Short Form Health Survey – Mental Component Score. VAS (3kg/f): VAS with 3kg/f at Algometry. FAOS: Foot and Ankle Outcome Score.

SWT	BMI		Age		Symptoms	
	Corr (r)	p-value	Corr (r)	p-value	Corr (r)	p-value
VISA-A	0,252	0,103	0,093	0,545	0,030	0,851
VAS	-0,053	0,734	-0,270	0,073	-0,232	0,139
AOFAS	0,140	0,372	0,062	0,685	0,325	0,036
SF12-PCS	0,093	0,552	-0,059	0,702	0,117	0,461
SF12-MCS	0,128	0,412	0,127	0,407	0,149	0,347
Algometry	0,248	0,128	0,292	0,067	0,047	0,778
VAS (3kg/f)	-0,182	0,275	-0,099	0,549	-0,161	0,340
FAOS	0,310	0,084	0,116	0,521	0,259	0,160

Table 12: Correlation between variables delta with group SWT.

BMI: body mass index. SWT: shockwave therapy group. Corr: Pearson's correlation. VISA-A: Victorian Institute of Sport Assessment – Achilles. VAS: visual analogic scale AOFAS: American Orthopedics Foot and Ankle Society score SF12-PCS: 12-item Short Form Health Survey – Physical Component Score SF12-MCS: 12-item Short Form Health Survey – Mental Component Score. VAS (3kg/f): VAS with 3kg/f at Algometry. FAOS: Foot and Ankle Outcome Score.

VISA-A			Mean	SD	N	CI	p-value
Worst Scenario VISA at 0	Week 0	CON	40.6	21.1	61	35.3 to 45.9	0.420
		SWT	43.9	23.2	58	37.9 to 49.9	
	Week 12	CON	42.5	34.6	61	33.8 to 51.2	0.292
		SWT	36.1	31.1	58	28.1 to 44.1	
	Week 24	CON	52.1	32.6	61	43.9 to 60.3	0.623
		SWT	49.0	35.9	58	39.8 to 58.2	
25% Scenario VISA at 25	Week 0	CON	40.6	21.1	61	35.3 to 45.9	0.420
		SWT	43.9	23.2	58	37.9 to 49.9	
	Week 12	CON	50.3	25.7	61	43.8 to 56.8	0.179
		SWT	44.3	22.5	58	38.5 to 50.1	
	Week 24	CON	56.2	26.8	61	49.5 to 62.9	0.756
		SWT	54.6	29.0	58	47.1 to 62.1	
Medium Scenario VISA at 50	Week 0	CON	40.6	21.1	61	35.3 to 45.9	0.420
		SWT	43.9	23.2	58	37.9 to 49.9	
	Week 12	CON	58.1	19.9	61	53.1 to 63.1	0.111
		SWT	52.5	18.0	58	47.9 to 57.1	
	Week 24	CON	60.3	23.4	61	54.4 to 66.2	0.984
		SWT	60.2	24.8	58	53.8 to 66.6	
75% Scenario VISA at 75	Week 0	CON	40.6	21.1	61	35.3 to 45.9	0.420
		SWT	43.9	23.2	58	37.9 to 49.9	
	Week 12	CON	65.9	20.1	61	60.8 to 71	0.167
		SWT	60.7	20.6	58	55.4 to 66	
	Week 24	CON	64.4	23.4	61	58.5 to 70.3	0.748
		SWT	65.8	24.7	58	59.5 to 72.1	
Best Scenario VISA at 100	Week 0	CON	40.6	21.1	61	35.3 to 45.9	0.420
		SWT	43.9	23.2	58	37.9 to 49.9	
	Week 12	CON	73.7	26.2	61	67.1 to 80.3	0.340
		SWT	68.9	28.3	58	61.6 to 76.2	

	CON	68.5	26.9	61	61.8 to 75.2	
Week 24						0.567
	SWT	71.4	28.7	58	64 to 78.8	

Table 13: Intention to treat analysis for the VISA-A. Imputation of missing variables was performed in five different scenarios. The “worst” scenario assigned 0 (zero) in all missing VISA-A scores. The 25% scenario designated 25 points to all missing VISA-A, the “medium” scenario 50 points and the 75% scenario inserted 75 points. Finally, the “best” scenario assigned 100 (one hundred) VISA-A points for the missing scores.

VISA-A: Victorian Institute of Sport Assessment – Achilles. CON: control group. SWT: shockwave therapy group. SD: standard deviation. N: number of subjects. CI: 95% confidence interval.

APPENDIX 2

Figure 3: Effect interaction through time for VISA-A. VISA-A: Victorian Institute of Sport Assessment – Achilles. CON: control group. SWT: shockwave therapy group

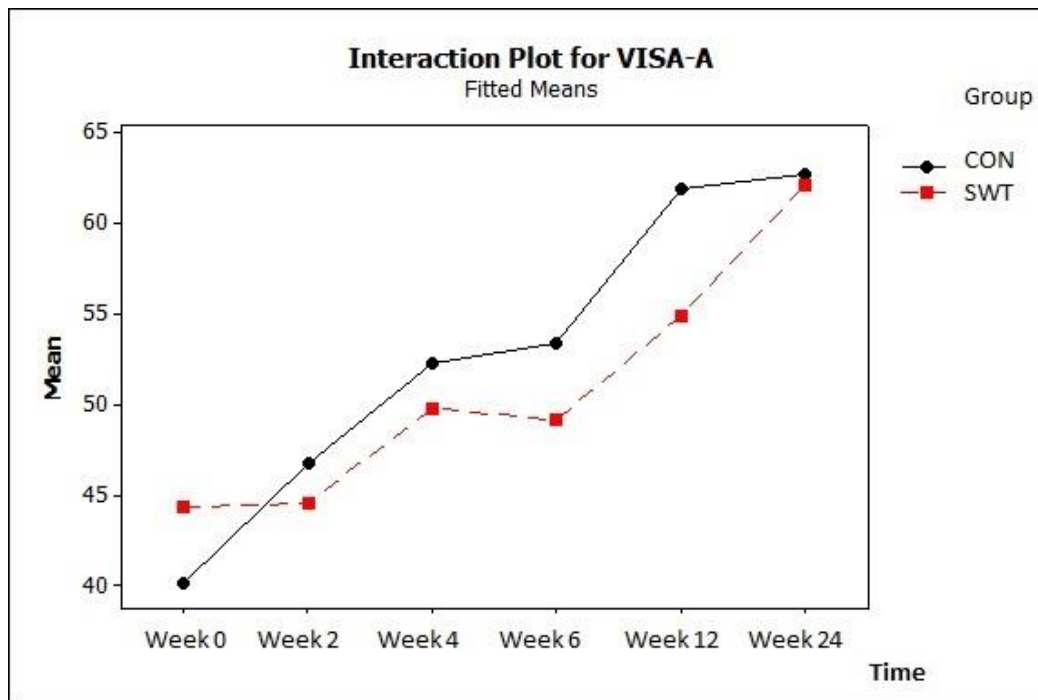


Figure 4: Group comparison by time for pain with the VAS. Mean values at pre-intervention (CON 5.62, SWT 5.69), 2 weeks (CON 4.85, SWT 4.77), 4 weeks (CON 4.17, SWT 4.11), 6 weeks (CON 3.61, SWT 3.41), 12 weeks (CON 2.89, SWT 3.52) and 24 weeks (CON 2.46, SWT 2.71). VAS: Visual Analogic Scale. CON: control group. SWT: shockwave therapy group.

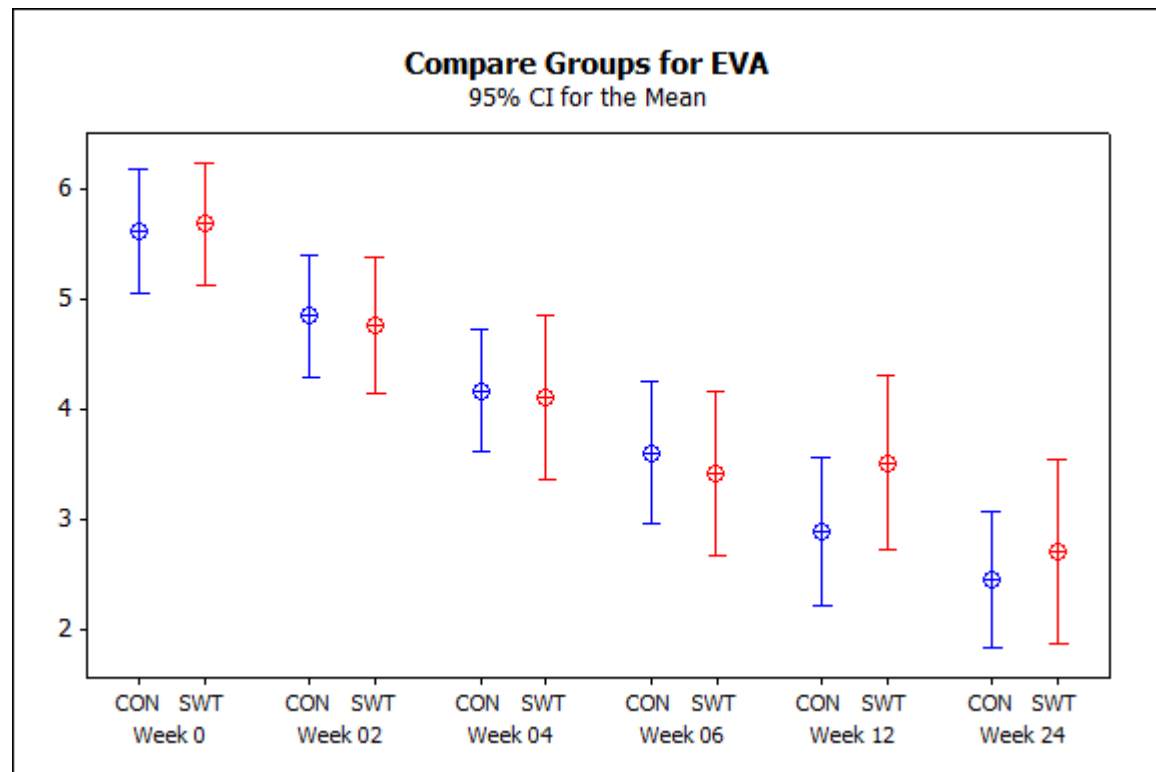


Figure 5: Group comparison by time for the AOFAS. Mean values at pre-intervention (CON 64.7, SWT 64.1), 2 weeks (CON 70.3, SWT 71.7), 4 weeks (CON 74.3, SWT 73.1), 6 weeks (CON 77.4, SWT 77.9), 12 weeks (CON 80.1, SWT 75.4) and 24 weeks (CON 82.0, SWT 79.7). AOFAS: American Orthopedics Foot and Ankle Society score. CON: control group. SWT: shockwave therapy group.

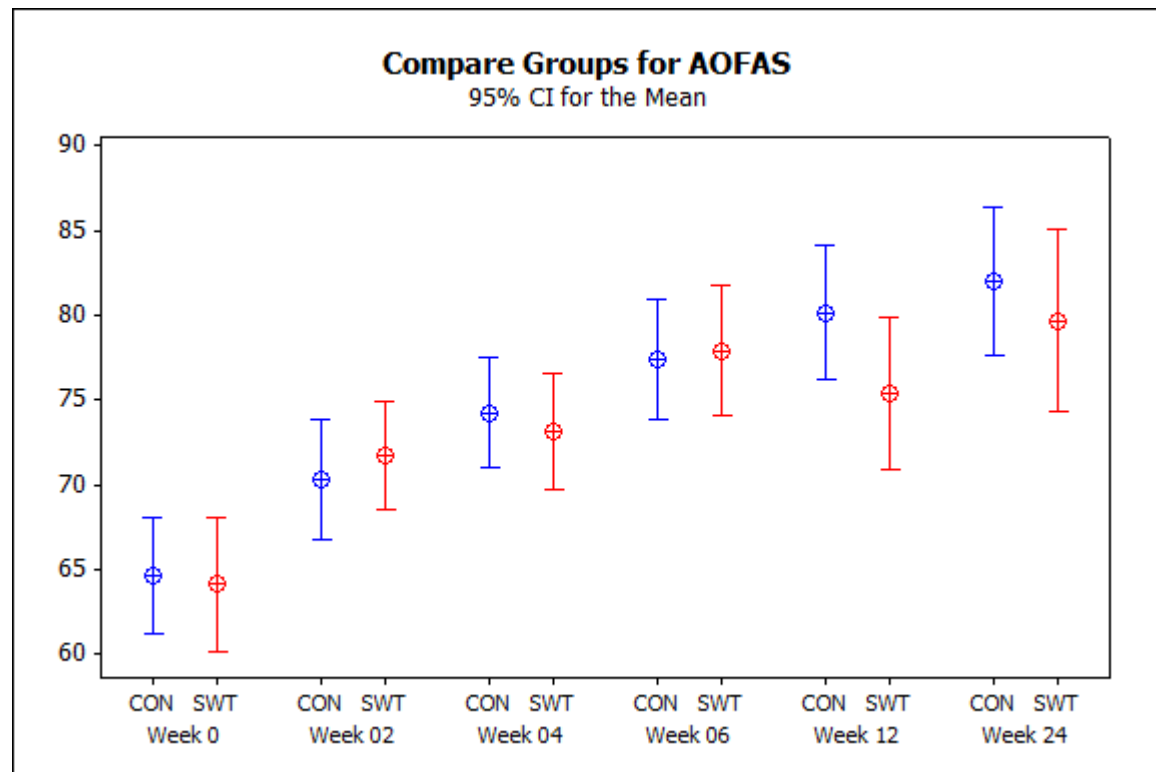


Figure 6: Group comparison by time for the SF12-PCS. Mean values at pre-intervention (CON 37.9, SWT 39.9), 2 weeks (CON 40.3, SWT 39.6), 4 weeks (CON 42.4, SWT 41.5), 6 weeks (CON 43.1, SWT 42.3), 12 weeks (CON 43.3, SWT 42.3) and 24 weeks (CON 44.2, SWT 43.6). SF12-PCS: 12-item Short Form Health Survey – Physical Component Score. CON: control group. SWT: shockwave therapy group.

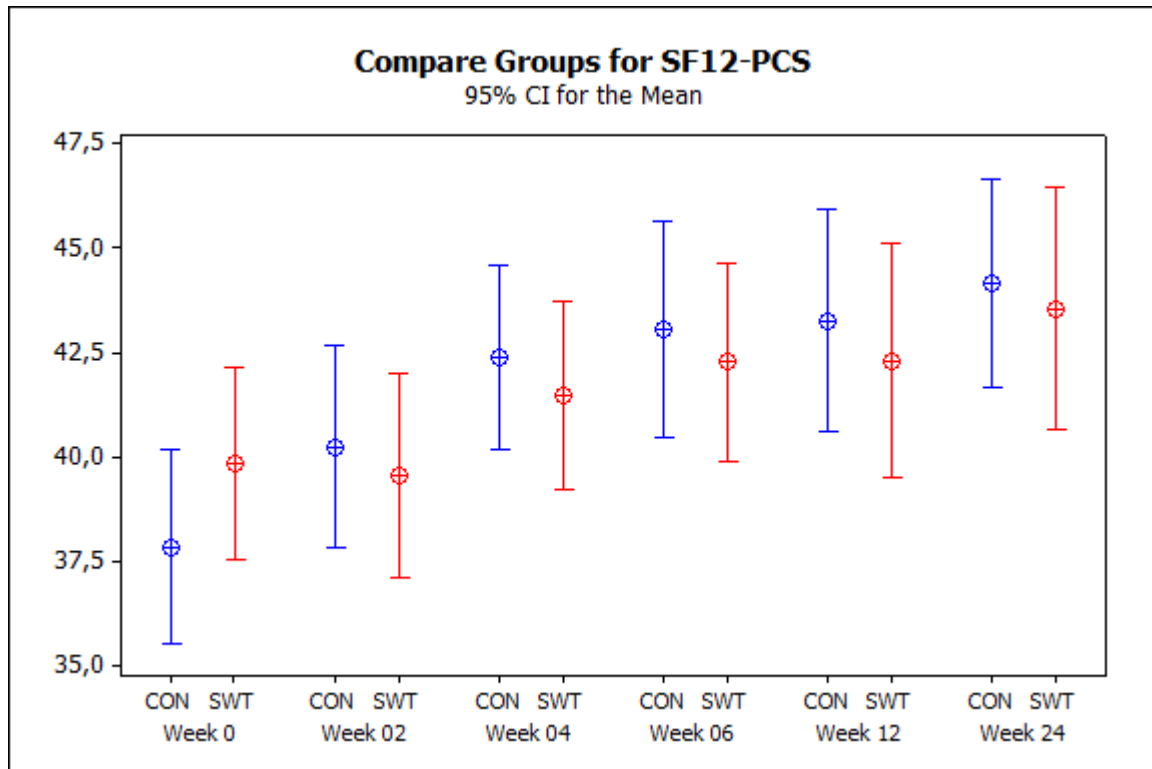


Figure 7: Group comparison by time for the SF12-MCS. Mean values at pre-intervention (CON 47.3, SWT 47.4), 2 weeks (CON 48.4, SWT 49.5), 4 weeks (CON 49.2, SWT 49.5), 6 weeks (CON 49.8, SWT 50.2), 12 weeks (CON 49.6, SWT 51.5) and 24 weeks (CON 50.0, SWT 51.8). SF12-MCS: 12-item Short Form Health Survey – Mental Component Score. CON: control group. SWT: shockwave therapy group.

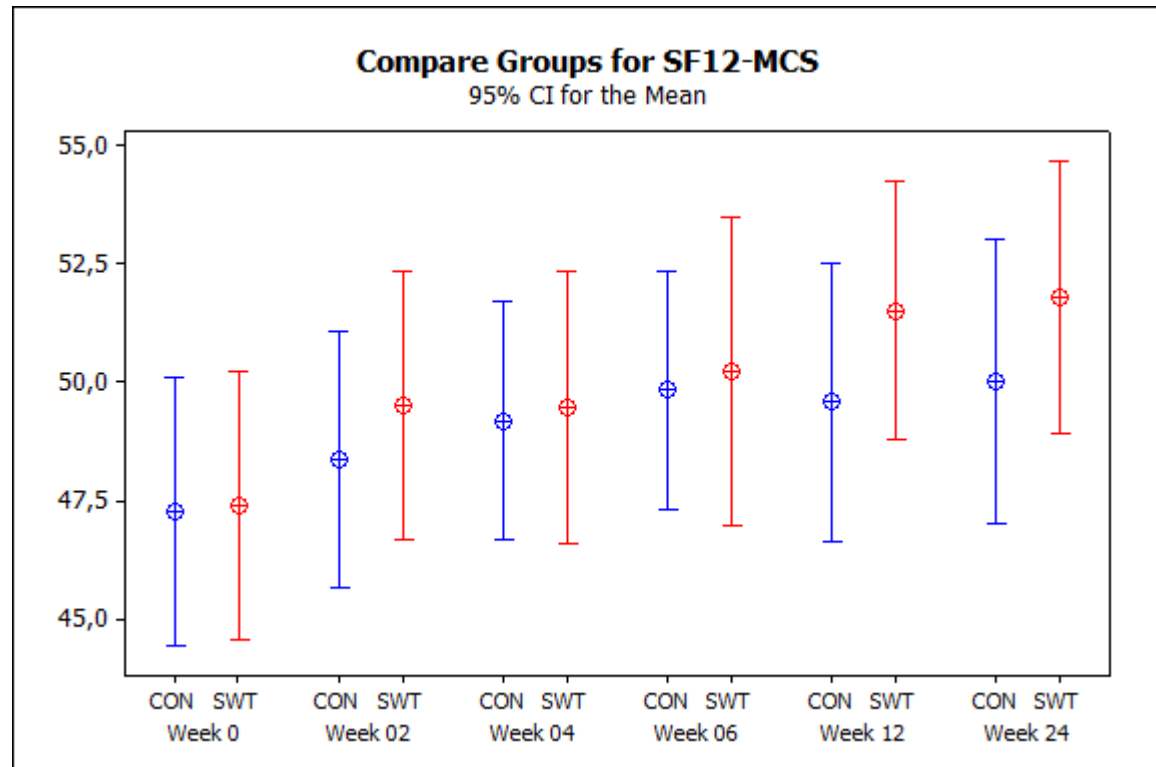


Figure 8: Group comparison by time for pain threshold levels at Algometry. Mean values at pre-intervention (CON 2.82, SWT 2.63), 2 weeks (CON 2.93, SWT 2.63), 4 weeks (CON 2.88, SWT 2.61), 6 weeks (CON 3.04, SWT 2.81), 12 weeks (CON 3.61, SWT 2.96) and 24 weeks (CON 4.15, SWT 4.22). CON: control group. SWT: shockwave therapy group.

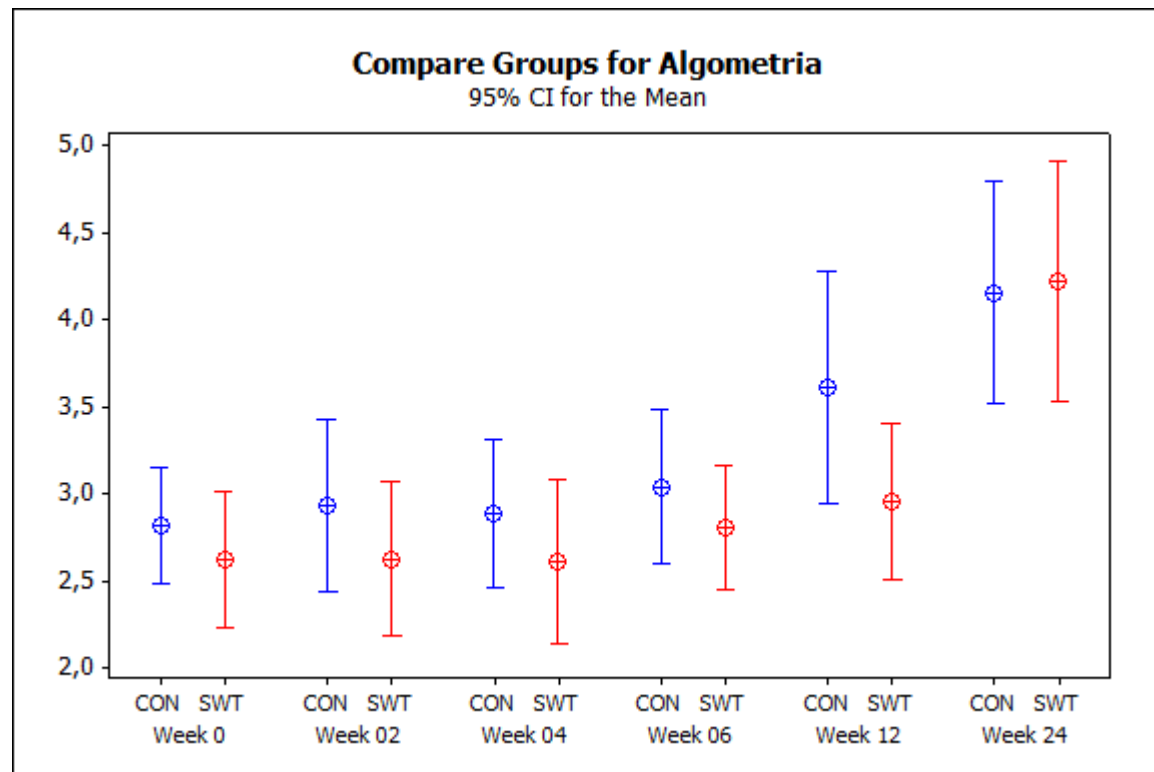


Figure 9: Group comparison by time for the FAOS. Mean values at pre-intervention (CON 52.3, SWT 50.0), 2 weeks (CON 56.0, SWT 55.1), 4 weeks (CON 64.5, SWT 59.5), 6 weeks (CON 66.5, SWT 64.9), 12 weeks (CON 72.2, SWT 63.6) and 24 weeks (CON 76.5, SWT 72.9). FAOS: Foot and Ankle Outcome Score. CON: control group. SWT: shockwave therapy group.

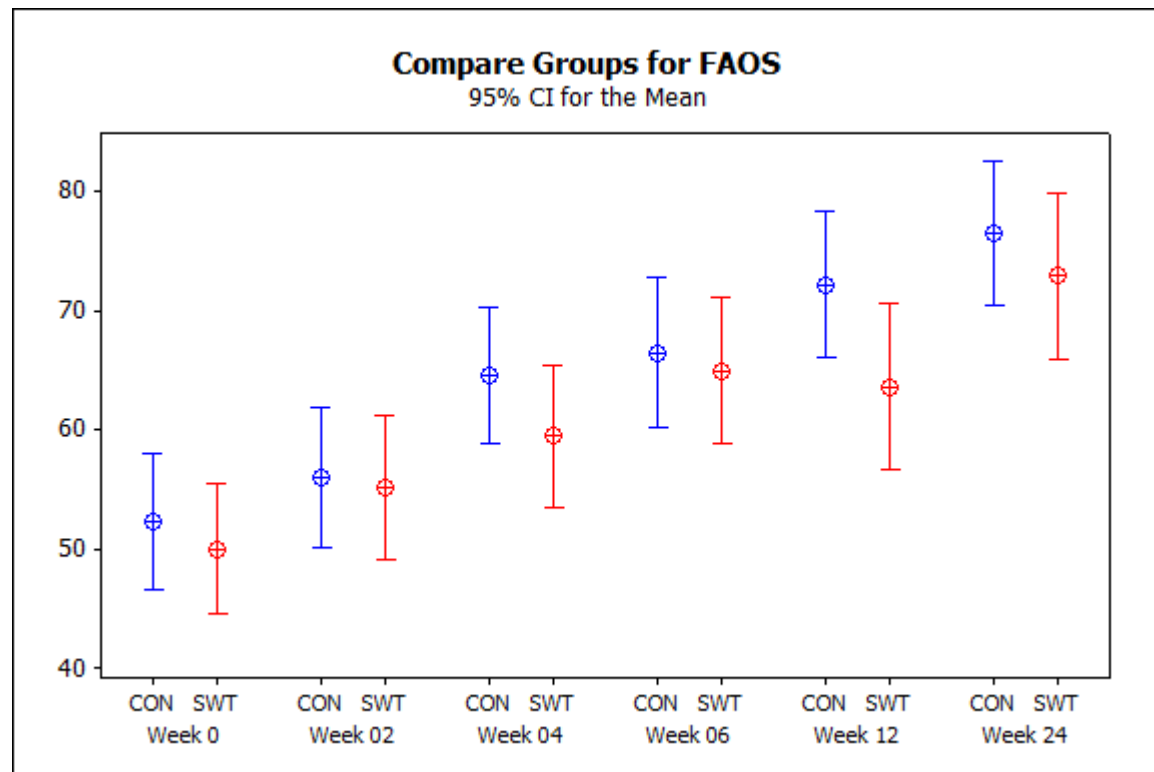


Figure 10: Group comparison by time for pain VAS with a 3k/f in Algometry. Mean values at pre-intervention (CON 5.93, SWT 5.79), 2 weeks (CON 5.20, SWT 5.47), 4 weeks (CON 4.95, SWT 4.65), 6 weeks (CON 4.69, SWT 4.50), 12 weeks (CON 4.16, SWT 4.27) and 24 weeks (CON 3.71, SWT 3.11). CON: control group. SWT: shockwave therapy group.

