

Supplementary material to: Craniosacral Therapy for chronic pain: a systematic review and meta-analysis of randomized controlled trials

By: Heidemarie Haller, Romy Lauche, Tobias Sundberg, Gustav Dobos, and Holger Cramer

Sensitivity analysis including only trails with low risk of selection bias:

Comparison	Outcome	Time point	Result	Change in significance
CST versus TAU	Pain intensity	Post intervention	1/2 RCTs, SMD = -0.35, 95%CI = [-0.71, 0.01], N = 123	Yes
	Functional disability	Post intervention	1/2 RCTs, SMD = -0.64, 95%CI = [-1.01, -0.28], N = 123	No
	Physical quality of life	Post intervention	1/1 RCT, SMD = 0.51, 95%CI = [0.15, 0.87], N = 123	No
CST versus SHAM	Pain intensity	Post intervention	3/4 RCTs, SMD = -0.73, 95%CI = [-1.09, -0.38], I ² = 10%, N = 146	No
		6-month follow-up	1/2 RCTs, SMD = -0.83, 95%CI = [-1.39, -0.28], N = 54	No
	Functional disability	Post intervention	3/4 RCTs, SMD = -0.55, 95%CI = [-0.96, -0.13], I ² = 31%, N = 146	No
		6-month follow-up	1/2 RCTs, SMD = -0.66, 95%CI = [-1.20, -0.11], N = 54	No
	Physical quality of life	Post intervention	1/2 RCTs, SMD = 0.42, 95%CI = [-0.12, 0.96], N = 54	Yes
		6-month follow-up	1/2 RCTs, SMD = 0.95, 95%CI = [0.38, 1.51], N = 54	No
	Mental quality of life	Post intervention	1/2 RCTs, SMD = 0.31, 95%CI = [-0.23, 0.85], N = 54	Yes
		6-month follow-up	No significant overall effects.	--
	Global improvement	Post intervention	1/2 RCTs, SMD = 1.10, 95%CI = [0.53, 1.68], N = 54	No
6-month follow-up		1/2 RCTs, SMD = 0.72, 95%CI = [0.17, 1.27], N = 54	No	
CST versus AMT	Pain intensity	Post intervention	2/2 RCTs, SMD = -0.53, 95%CI = [-0.89, -0.16], I ² = 0%, N = 119	No
	Functional disability	Post intervention	2/2 RCTs, SMD = -0.58, 95%CI = [-0.95, -0.21], I ² = 0%, N = 119	No

Sensitivity analysis including only trails with low risk of performance bias:

Comparison	Outcome	Time point	Result	Change in significance
CST versus TAU	Pain intensity	Post intervention	The analysis did not contain trails with low risk of performance bias.	--
	Functional disability	Post intervention	The analysis did not contain trails with low risk of performance bias.	--
	Physical quality of life	Post intervention	The analysis did not contain trails with low risk of performance bias.	--
CST versus SHAM	Pain intensity	Post intervention	1/4 RCTs, SMD = -1.05, 95%CI = [-1.62, -0.48], N = 54	No
		6-month follow-up	1/2 RCTs, SMD = -0.83, 95%CI = [-1.39, -0.28], N = 54	No
	Functional disability	Post intervention	1/4 RCTs, SMD = -0.63, 95%CI = [-1.18, -0.09], N = 54	No
		6-month follow-up	1/2 RCTs, SMD = -0.66, 95%CI = [-1.20, -0.11], N = 54	No
	Physical quality of life	Post intervention	1/2 RCTs, SMD = 0.42, 95%CI = [-0.12, 0.96], N = 54	Yes
		6-month follow-up	1/2 RCTs, SMD = 0.95, 95%CI = [0.38, 1.51], N = 54	No
	Mental quality of life	Post intervention	1/2 RCTs, SMD = 0.31, 95%CI = [-0.23, 0.85], N = 54	Yes
		6-month follow-up	No significant overall effects.	--
	Global improvement	Post intervention	1/2 RCTs, SMD = 1.10, 95%CI = [0.53, 1.68], N = 54	No
6-month follow-up		1/2 RCTs, SMD = 0.72, 95%CI = [0.17, 1.27], N = 54	No	
CST versus AMT	Pain intensity	Post intervention	The analysis did not contain trails with low risk of performance bias.	--
	Functional disability	Post intervention	The analysis did not contain trails with low risk of performance bias.	--

Sensitivity analysis including only trials with low risk of detection bias:

Comparison	Outcome	Time point	Result	Change in significance
CST versus TAU	Pain intensity	Post intervention	The analysis did not contain trails with low risk of detection bias.	–
	Functional disability	Post intervention	The analysis did not contain trails with low risk of detection bias.	–
	Physical quality of life	Post intervention	The analysis did not contain trails with low risk of detection bias.	–
CST versus SHAM	Pain intensity	Post intervention	2/4 RCTs, SMD = -0.97, 95%CI = [-1.44, -0.49], I ² = 0%, N = 77	No
		6-month follow-up	1/2 RCTs, SMD = -0.83, 95%CI = [-1.39, -0.28], N = 54	No
	Functional disability	Post intervention	2/4 RCTs, SMD = -0.76, 95%CI = [-1.22, -0.29], I ² = 0%, N = 77	No
		6-month follow-up	1/2 RCTs, SMD = -0.66, 95%CI = [-1.20, -0.11], N = 54	No
	Physical quality of life	Post intervention	1/2 RCTs, SMD = 0.42, 95%CI = [-0.12, 0.96], N = 54	Yes
		6-month follow-up	1/2 RCTs, SMD = 0.95, 95%CI = [0.38, 1.51], N = 54	No
	Mental quality of life	Post intervention	1/2 RCTs, SMD = 0.31, 95%CI = [-0.23, 0.85], N = 54	Yes
		6-month follow-up	No significant overall effects.	–
Global improvement	Post intervention	2/2 RCTs, SMD = 1.29, 95%CI = [0.93, 1.65], I ² = 0%, N = 146	No	
	6-month follow-up	2/2 RCTs, SMD = 0.51, 95%CI = [0.18, 0.84], I ² = 0%, N = 146	No	
CST versus AMT	Pain intensity	Post intervention	1/2 RCTs, SMD = -0.56, 95%CI = [-1.06, -0.06], N = 64	No
	Functional disability	Post intervention	1/2 RCTs, SMD = -0.74, 95%CI = [-1.25, -0.24], N = 64	No

Sensitivity analysis including only trials with low risk of attrition bias:

Comparison	Outcome	Time point	Result	Change in significance
CST versus TAU	Pain intensity	Post intervention	2/2 RCTs, SMD = -0.32, 95%CI = [-0.61, -0.02], I ² = 0%, N = 183	No
	Functional disability	Post intervention	2/2 RCTs, SMD = -0.58, 95%CI = [-0.92, -0.24], I ² = 0%, N = 143	No
	Physical quality of life	Post intervention	1/1 RCT, SMD = 0.51, 95%CI = [0.15, 0.87], N = 123	No
CST versus SHAM	Pain intensity	Post intervention	4/4 RCTs, SMD = -0.63, 95%CI = [-0.90, -0.37], I ² = 0%, N = 230	No
		6-month follow-up	2/2 RCTs, SMD = -0.59, 95%CI = [-0.99, -0.19], I ² = 25%, N = 138	No
	Functional disability	Post intervention	4/4 RCTs, SMD = -0.54, 95%CI = [-0.81, -0.28], I ² = 0%, N = 230	No
		6-month follow-up	2/2 RCTs, SMD = -0.53, 95%CI = [-0.87, -0.19], I ² = 0%, N = 138	No
	Physical quality of life	Post intervention	2/2 RCTs, SMD = 0.59, 95%CI = [0.25, 0.93], I ² = 0%, N = 138	No
		6-month follow-up	2/2 RCTs, SMD = 0.62, 95%CI = [0.02, 1.21], I ² = 64%, N = 138	No
	Mental quality of life	Post intervention	2/2 RCTs, SMD = 0.35, 95%CI = [0.01, 0.69], I ² = 0%, N = 138	No
		6-month follow-up	No significant overall effects.	–
Global improvement	Post intervention	2/2 RCTs, SMD = 1.29, 95%CI = [0.93, 1.65], I ² = 0%, N = 146	No	
	6-month follow-up	2/2 RCTs, SMD = 0.51, 95%CI = [0.18, 0.84], I ² = 0%, N = 146	No	
CST versus AMT	Pain intensity	Post intervention	1/2 RCTs, SMD = -0.56, 95%CI = [-1.06, -0.06], N = 64	No
	Functional disability	Post intervention	1/2 RCTs, SMD = -0.74, 95%CI = [-1.25, -0.24], N = 64	No

Sensitivity analysis including only trials with low risk of reporting bias:

Comparison	Outcome	Time point	Result	Change in significance
CST versus TAU	Pain intensity	Post intervention	1/2 RCTs, SMD = -0.35, 95%CI = [-0.71, 0.01], N = 123	Yes
	Functional disability	Post intervention	1/2 RCTs, SMD = -0.64, 95%CI = [-1.01, -0.28], N = 123	No
	Physical quality of life	Post intervention	1/1 RCT, SMD = 0.51, 95%CI = [0.15, 0.87], N = 123	No
CST versus SHAM	Pain intensity	Post intervention	2/4 RCTs, SMD = -0.73, 95%CI = [-1.29, -0.18], I ² = 59%, N = 138	No
		6-month follow-up	1/2 RCTs, SMD = -0.83, 95%CI = [-1.39, -0.28], N = 54	No
	Functional disability	Post intervention	2/4 RCTs, SMD = -0.61, 95%CI = [-0.96, -0.27], I ² = 0%, N = 138	No
		6-month follow-up	2/2 RCTs, SMD = -0.53, 95%CI = [-0.87, -0.19], I ² = 0%, N = 138	No
	Physical quality of life	Post intervention	2/2 RCTs, SMD = 0.59, 95%CI = [0.25, 0.93], I ² = 0%, N = 138	No
		6-month follow-up	2/2 RCTs, SMD = 0.62, 95%CI = [0.02, 1.21], I ² = 64%, N = 138	No
	Mental quality of life	Post intervention	2/2 RCTs, SMD = 0.35, 95%CI = [0.01, 0.69], I ² = 0%, N = 138	No
		6-month follow-up	No significant overall effects.	–
	Global improvement	Post intervention	1/2 RCTs, SMD = 1.10, 95%CI = [0.53, 1.68], N = 54	No
6-month follow-up		1/2 RCTs, SMD = 0.72, 95%CI = [0.17, 1.27], N = 54	No	
CST versus AMT	Pain intensity	Post intervention	1/2 RCTs, SMD = -0.56, 95%CI = [-1.06, -0.06], N = 64	No
	Functional disability	Post intervention	1/2 RCTs, SMD = -0.74, 95%CI = [-1.25, -0.24], N = 64	No

Sensitivity analysis including only trials with low risk of other bias:

Comparison	Outcome	Time point	Result	Change in significance
CST versus TAU	Pain intensity	Post intervention	The analysis did not contain trials with low risk of other bias.	–
	Functional disability	Post intervention	The analysis did not contain trials with low risk of other bias.	–
	Physical quality of life	Post intervention	The analysis did not contain trials with low risk of other bias.	–
CST versus SHAM	Pain intensity	Post intervention	1/4 RCTs, SMD = -1.05, 95%CI = [-1.62, -0.48], N = 54	No
		6-month follow-up	1/2 RCTs, SMD = -0.83, 95%CI = [-1.39, -0.28], N = 54	No
	Functional disability	Post intervention	1/4 RCTs, SMD = -0.63, 95%CI = [-1.18, -0.09], N = 54	No
		6-month follow-up	1/2 RCTs, SMD = -0.66, 95%CI = [-1.20, -0.11], N = 54	No
	Physical quality of life	Post intervention	1/2 RCTs, SMD = 0.42, 95%CI = [-0.12, 0.96], N = 54	Yes
		6-month follow-up	1/2 RCTs, SMD = 0.95, 95%CI = [0.38, 1.51], N = 54	No
	Mental quality of life	Post intervention	1/2 RCTs, SMD = 0.31, 95%CI = [-0.23, 0.85], N = 54	Yes
		6-month follow-up	No significant overall effects.	–
	Global improvement	Post intervention	1/2 RCTs, SMD = 1.10, 95%CI = [0.53, 1.68], N = 54	No
6-month follow-up		1/2 RCTs, SMD = 0.72, 95%CI = [0.17, 1.27], N = 54	No	
CST versus AMT	Pain intensity	Post intervention	The analysis did not contain trials with low risk of other bias.	–
	Functional disability	Post intervention	The analysis did not contain trials with low risk of other bias.	–