Pico 8 as treated

Review information

Authors

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[1][Empty affiliation]

Citation example: S. Pico 8. Cochrane Database of Systematic Reviews [Year], Issue [Issue].

Characteristics of studies

Characteristics of included studies

Delitto 2015

Methods	**Study design:** Randomized controlled trial **Study grouping:** Parallel group
Participants	**Baseline Characteristics** Intervention Control Overall **Included criteria:** LSS identified by CT. All Patients were considered by a surgeon to be candidates to surgical dekompression. Consent to surgery.Neurogen cladication.Consent to be randomly assigened to surgery or a specified PT clinic. **Excluded criteria:** No previous surgery for LSS at the level being considered for dekompression.Younger than 50 years.Serious Dementia.Severe vascular disease.Myocardial infarction.SpondylolisthesisCompression fracturesMetastatic cancer **Pretreatment:** Ingen betydende forskelle
Interventions	**Intervention Characteristics** Intervention ● *description*: dekompressiv laminektomi. Partiel facetledsresektion ● *dose*: . ● *duration*: . Control ● *description*: lumbar flexion exercises. Condition exercises. General patient education. pelvic tilts. Supine knee to chest exercises. Cycling and treadmill walking. lower extremity strenghening exercises. Patient education to avoid hyperextension of the lumbar spine. ● *dose*: 2 times a week ● *duration*: 6 weeks
Outcomes	*SF36 (physical function score)* ● **Outcome type**: ContinuousOutcome ● **Reporting**: Fully reported ● **Scale**: SF36 ● **Range**: 0-100 ● **Direction**: Higher is better ● **Data value**: Endpoint *ODI* ● **Outcome type**: ContinuousOutcome ● **Scale**: ODI ● **Range**: 0-100 ● **Direction**: Lower is better ● **Data value**: Endpoint *PAIN (low back)* ● **Outcome type**: ContinuousOutcome *Walking ability (self-reported)* ● **Outcome type**: ContinuousOutcome *kirurgisk komplikation* ● **Outcome type**: AdverseEvent *livskvalitet* ● **Outcome type**: ContinuousOutcome *Behov for smertestillende* ● **Outcome type**: DichotomousOutcome *antal fald* ● **Outcome type**: DichotomousOutcome
Identification	**Sponsorship source:** National Institutes of health and national institute of Arthritis and Musculosceletal and skin diseases **Country:** USA **Setting:** .

	Comments: . **Authors name:** Anthony Delitto **Institution:** University of Pittsburgh and University of Pittsburgh Medical Center, Pittsburgg, Pennsylvania. University of Utah, Salt Lake City, Utah. University of Pennsylvania, Philadelphia, Pennsylvania **Email:** mooreecg@upmc.edm **Address:** Dept physical therapy, University of Pittsburg
Notes	*Søren Fruensgaard* on 02/01/2017 20:37 **Select** få ptt inkluderet over en 7 års periode uden kontrolgruppe, mange krydset til kirurgi *NKR 51 Stenose* on 23/01/2017 20:02 **Outcomes** 47 af de 82 patienter i den konservative gruppe krydsede fra fysioterapi til operation over en 2 års periode.

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	
Allocation concealment (selection bias)	Low risk	
Blinding of participants and personnel (performance bias)	High risk	
Blinding of outcome assessment (detection bias)	Low risk	
Incomplete outcome data (attrition bias)	High risk	
Selective reporting (reporting bias)	Low risk	
Other bias	High risk	Judgement Comment: høj grad af cross over

Slatis 2011

Methods	**Study design:** Randomized controlled trial **Study grouping:** Parallel group
Participants	**Baseline Characteristics** Intervention Control Overall **Included criteria:** **Excluded criteria:** **Pretreatment:**
Interventions	**Intervention Characteristics** Intervention ● *description*: ● *dose*: ● *duration*: Control ● *description*: ● *dose*: ● *duration*:
Outcomes	*ODI* ● **Outcome type**: ContinuousOutcome ● **Range**: 0-100 ● **Direction**: Lower is better ● **Data value**: Endpoint *PAIN (Leg)* ● **Outcome type**: ContinuousOutcome ● **Range**: 0-10 ● **Direction**: Lower is better ● **Data value**: Endpoint *PAIN (low back)* ● **Outcome type**: ContinuousOutcome ● **Range**: 0-10 ● **Direction**: Lower is better ● **Data value**: Endpoint *Walking ability (self-reported)* ● **Outcome type**: ContinuousOutcome ● **Range**: 0-? ● **Unit of measure**: m ● **Data value**: Endpoint *kirurgisk komplikation* ● **Outcome type**: AdverseEvent

	livskvalitet ● **Outcome type**: ContinuousOutcome *Behov for smertestillende* ● **Outcome type**: DichotomousOutcome *antal fald* ● **Outcome type**: DichotomousOutcome
Identification	**Sponsorship source:** **Country:** Finland **Setting:** **Comments:** **Authors name:** **Institution:** **Email:** **Address:**
Notes	*Søren Fruensgaard* on 02/01/2017 20:43 **Select** kan ikke se tekst *NKR 51 Stenose* on 13/01/2017 00:18 **Included** Rikke: Den samme studiepopulation som Malmivaara, men 6 års follow up *NKR 51 Stenose* on 23/01/2017 21:55 **Outcomes** 4 patienter krydsede over fra kontrol gruppen til operationsgruppen

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	
Allocation concealment (selection bias)	Low risk	
Blinding of participants and personnel (performance bias)	High risk	
Blinding of outcome assessment (detection bias)	Unclear risk	n
Incomplete outcome data (attrition bias)	Low risk	
Selective reporting (reporting bias)	Low risk	
Other bias	Low risk	

Weinstein 2008

Methods	**Study design:** Randomized controlled trial **Study grouping:** Parallel group
Participants	**Baseline Characteristics** Intervention Control Overall **Included criteria:** neurogenic claudication or radicular leg symptoms for at least 12 weeks and confirmatory cross-sectional imaging showing lumbar spinal stenosis at one or more levels; all patients were judged to be surgical can-didates. **Excluded criteria:** Patients with lumbar instability (which was defined as transla-tion of more than 4 mm or 10 degrees of angular motion between flexion and extension on upright lateral radiographs) were excluded. **Pretreatment:** Ingen betydende forskelle
Interventions	**Intervention Characteristics** Intervention ● *description*: standard posterior decompressive laminectomy ● *dose*: . ● *duration*: . Control ● *description*: usual care: at least active physical therapy, education or counseling with home exercise instruction, and the administration of nonsteroidal antiinflammatory drugs, if tolerated ● *dose*: ikke beskrevet ● *duration*: ikke beskrevet
Outcomes	*kirurgisk komplikation* ● **Outcome type**: AdverseEvent *livskvalitet* ● **Outcome type**: ContinuousOutcome *Behov for smertestillende* ● **Outcome type**: DichotomousOutcome

	antal fald ● **Outcome type**: DichotomousOutcome *SF36 bodily pain score* ● **Outcome type**: ContinuousOutcome ● **Reporting**: Fully reported ● **Scale**: SF36 ● **Range**: 0-100 ● **Direction**: Higher is better ● **Data value**: Change from baseline *SF36 (physical function score)* ● **Outcome type**: ContinuousOutcome ● **Reporting**: Fully reported ● **Scale**: sf36 ● **Range**: 0-100 ● **Direction**: Higher is better ● **Data value**: Change from baseline *ODI* ● **Outcome type**: ContinuousOutcome ● **Reporting**: Fully reported ● **Range**: 0-100 ● **Direction**: Lower is better ● **Data value**: Change from baseline *Leg Pain bothersome index* ● **Outcome type**: ContinuousOutcome ● **Reporting**: Fully reported ● **Range**: 0-10 ● **Direction**: Lower is better ● **Data value**: Endpoint *Low back pain bothersome index* ● **Outcome type**: ContinuousOutcome ● **Reporting**: Fully reported ● **Range**: 0-6 ● **Direction**: Lower is better ● **Data value**: Change from baseline
Identification	**Sponsorship source:** national institute of arthritis and muskuloskeletal and skin diseases, national institute of of Health office of research on womans Health,national institute of occupational safety **Country:** USA **Setting:** . **Comments:** . **Authors name:** James N Weinstein **Institution:** departments of orthopedics, community and family medicine, and medicine **Email:** . **Address:** dartmouth Medical school
Notes	*Søren Fruensgaard* on 02/01/2017 20:47 **Select** mangler tekst *NKR 51 Stenose* on 10/01/2017 20:13 **Included** Rikke: Dette er de samme patienter som i Weinstein 2010. Der trækkes ikke data ud af denne, men i 2010 udgaven *NKR 51 Stenose* on 14/01/2017 01:22 **Included** Rikke: der skal alligevel trækkes data ud, da der i denne artikel er outcome efter 6 uger og 3 måneder og i den forrige efter 1,2,3 og 4 år

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	n
Allocation concealment (selection bias)	Unclear risk	n
Blinding of participants and personnel (performance bias)	High risk	
Blinding of outcome assessment (detection bias)	Unclear risk	n
Incomplete outcome data (attrition bias)	Low risk	
Selective reporting (reporting bias)	Low risk	
Other bias	Low risk	

Footnotes

References to studies

Included studies

Delitto 2015

Delitto, Anthony; Piva, Sara R.; Moore, Charity G.; Fritz, Julie M.; Wisniewski, Stephen R.; Josbeno, Deborah A.; Fye, Mark; Welch, William C.. Surgery versus nonsurgical treatment of lumbar spinal stenosis: a randomized trial.. Annals of Internal Medicine 2015;162(7):465-473. [DOI: http://dx.doi.org/10.7326/M14-1420]

Slatis 2011

Slatis, P.; Malmivaara, A.; Heliovaara, M.; Sianio, P.; Herno, A.; Kankare, J.; Seitsalo, S.; Tallroth, K.; Turunen, V.; Knekt, P.; Hurri, H.. Long-term results of surgery for lumbar spinal stenosis: a randomised controlled trial. European Spine Journal 2011;20(7):1174-1181. [DOI:]

Weinstein 2008

Weinstein, J. N.; Tosteson, T. D.; Lurie, J. D.; Tosteson, A. N. A.; Blood, E.; Hanscom, B.; Herkowitz, H.; Cammisa, F.; Albert, T.; Boden, S. D.; Hilibrand, A.; Goldberg, H.; Berven, S.; An, H.; Sport, Investigators. Surgical versus nonsurgical therapy for lumbar spinal stenosis. The New England journal of medicine 2008;358(8):794-810. [DOI:]

Excluded studies

Croft 2012

Croft, Arthur. Conservative vs. surgical care of lumbar spinal stenosis. Dynamic Chiropractic 2012;30(5):5p-5p. [DOI:]

Maislin 2015

Maislin G.; Rauschmann M.; Sola S.; Adelt D.; Bonsanto M.M.; Franke J.; Schmidt, S.. Two-year outcomes of prospective randomized trial comparing lumbar decompression with or without interlaminar stabilization.. Spine Journal 2015;Conference(Journal Article):30th. [DOI: http://dx.doi.org/10.1016/j.spinee.2015.07.381]

Overdevest 2010

Overdevest G.; VleggeertLankamp C.; Luijsterburg P.; Brand R.; Eekhof J.; Westendorp R.; Van Den Hout W.; Jacobs W.; BiermaZeinstra S.; Koes B.; Peul, W.. (Cost) effectiveness of surgery versus prolonged conservative treatment in lumbar stenosis: Design of a randomized controlled trial.. Osteoarthritis and Cartilage 2010;18(Journal Article):S230-S231. [DOI: http://dx.doi.org/10.1016/S1063-4584%2810%2960542-0]

Parker 2012

Parker S.; Zuckerman S.; Shau D.; Mendenhall S.; Cheng J.S.; Devin C.; McGirt, M.. Cost-utility and comparative effectiveness analyses of laminectomy versus comprehensive medical management for lumbar stenosis.. Journal of neurosurgery 2012;117(2):A406. [DOI:]

Weinstein 2007

Weinstein, J. N.; Lurie, J. D.; Tosteson, T. D.; Hanscom, B.; Tosteson, A. N.; Blood, E. A.; Birkmeyer, N. J.; Hilibrand, A. S.; Herkowitz, H.; Cammisa, F. P.; Albert, T. J.; Emery, S. E.; Lenke, L. G.; Abdu, W. A.; Longley, M.; Errico, T. J.; Hu, S. S.. Surgical versus nonsurgical treatment for lumbar degenerative spondylolisthesis. The New England journal of medicine 2007;356(22):2257-2270. [DOI:]

Data and analyses

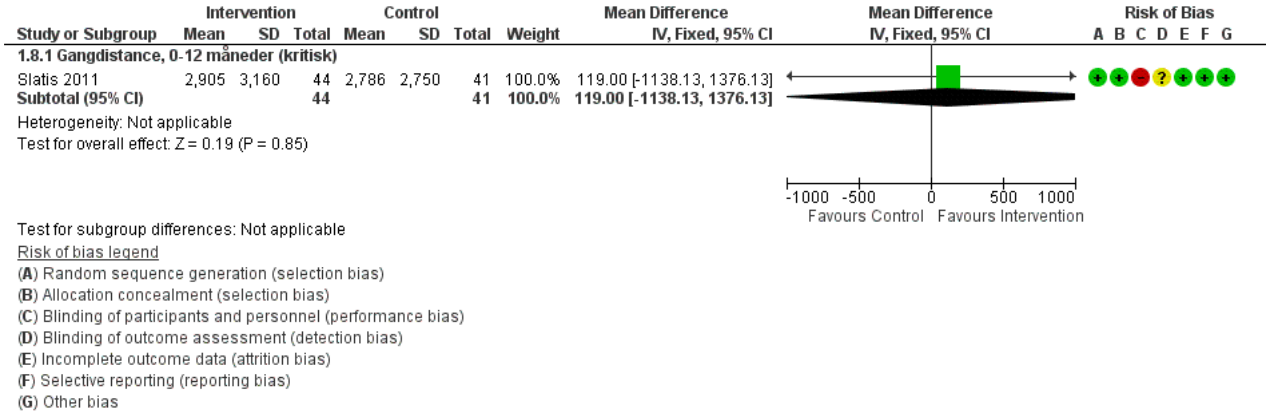
1 Dekompression vs standard behandling

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
1.1 Funktions evne, ODI, 1-12 måneder (kritisk)	3		Mean Difference (IV, Random, 95% CI)	Subtotals only
1.1.1 Funktions evne, ODI, 0-12 måneder (kritisk)	3	489	Mean Difference (IV, Random, 95% CI)	-1.64 [-5.38, 2.09]
1.2 Funktions evne "as treated", ODI, 1-12 måneder (kritisk)	3		Mean Difference (IV, Random, 95% CI)	Subtotals only
1.2.2 Funktions evne "as treated", ODI, 0-12 måneder (kritisk)	3	489	Mean Difference (IV, Random, 95% CI)	-6.97 [-15.80, 1.85]
1.3 Smerter, 1-12 måneder (kritisk)	2		Mean Difference (IV, Random, 95% CI)	Subtotals only
1.3.1 Smerter, VAS, leg pain 1-12 måneder (kritisk)	2	340	Mean Difference (IV, Random, 95% CI)	-0.89 [-2.25, 0.46]
1.4 Smerter "as treated", 1-12 måneder (kritisk)	2		Mean Difference (IV, Random, 95% CI)	Subtotals only
1.4.2 Smerter "as treated", VAS, leg pain 1-12 måneder (kritisk)	2	340	Mean Difference (IV, Random, 95% CI)	-1.80 [-2.07, -1.52]
1.5 kirurgisk komplikation - nerveskader, EoT (vigtigt)	0		Risk Ratio (IV, Fixed, 95% CI)	No totals
1.6 kirurgisk komplikation - Infektion, EoT (vigtigt)	0		Risk Ratio (IV, Fixed, 95% CI)	No totals
1.7 Smerter, EoT (vigtigt)	0		Mean Difference (IV, Random, 95% CI)	Subtotals only
1.8 Gangdistance, 1-12 måneder (kritisk)	1		Mean Difference (IV, Fixed, 95% CI)	Subtotals only
1.8.1 Gangdistance, 0-12 måneder (kritisk)	1	85	Mean Difference (IV, Fixed, 95% CI)	119.00 [-1138.13, 1376.13]

1.9 Livskvalitet, 1-12 måneder (vigtigt)	0	0	Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.10 behov for smertestillende, 1-12 måneder (Vigtigt)	0		Risk Ratio (IV, Fixed, 95% CI)	No totals
1.11 antal fald, 1-12 måneder (Vigtigt)	0		Risk Ratio (IV, Fixed, 95% CI)	No totals
1.12 kirurgisk komplikation - Blødning, EoT (kritisk)	0		Risk Ratio (IV, Fixed, 95% CI)	No totals

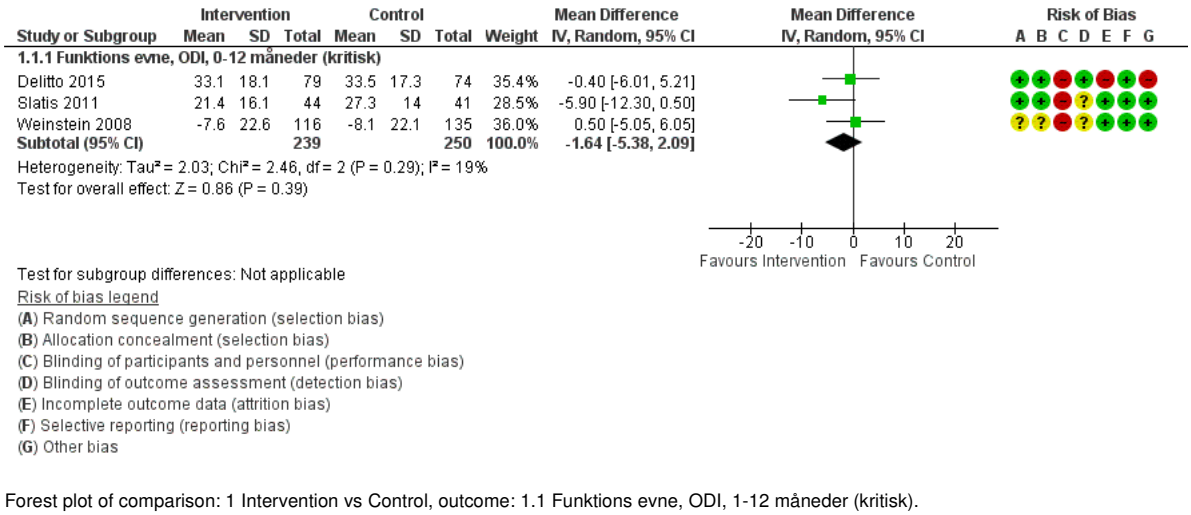
Figures

Figure 1 (Analysis 1.8)



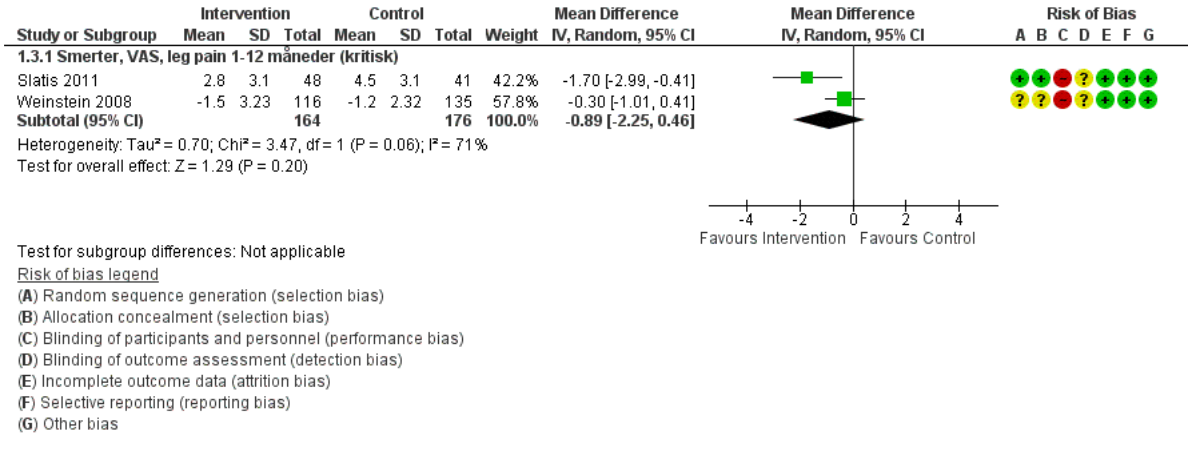
Forest plot of comparison: 1 Intervention vs Control, outcome: 1.8 Gangdistance, 1-12 måneder (kritisk).

Figure 2 (Analysis 1.1)



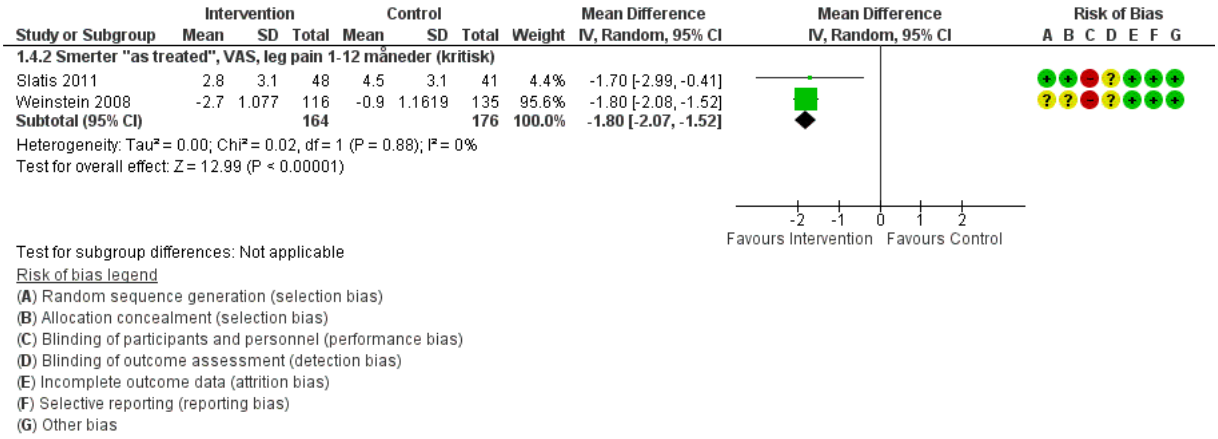
Forest plot of comparison: 1 Intervention vs Control, outcome: 1.1 Funktions evne, ODI, 1-12 måneder (kritisk).

Figure 3 (Analysis 1.3)



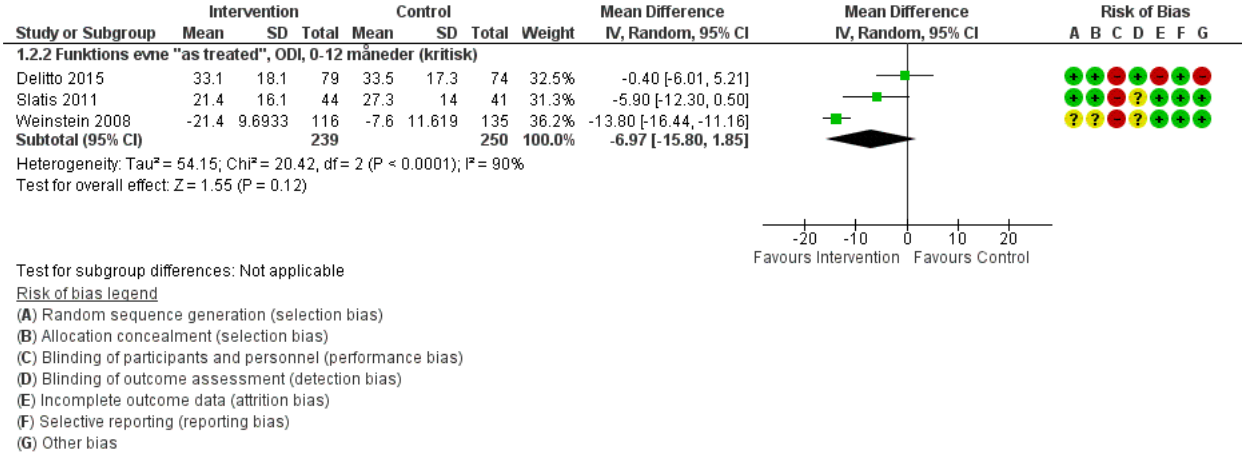
Forest plot of comparison: 1 Intervention vs Control, outcome: 1.3 Smerter, 1-12 måneder (kritisk).

Figure 4 (Analysis 1.4)



Forest plot of comparison: 1 Intervention vs Control, outcome: 1.4 Smerter "as treated", 1-12 måneder (kritisk).

Figure 5 (Analysis 1.2)



Forest plot of comparison: 1 Intervention vs Control, outcome: 1.2 Funktions evne "as treated", ODI, 1-12 måneder (kritisk).