<table>
<thead>
<tr>
<th>Trial</th>
<th>Number</th>
<th>Interventions</th>
<th>Outcomes / follow-up</th>
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</table>
| Amundsen et al. [1] | 31 | 1. Decompression surgery (13)  
2. Orthosis, back school (18)  
Both groups general physical training | Clinician determined good or bad result at 6 months  
1, 4 and 10 years. Good results:  
1: 92%, 69%, 92%, 91%.  
2: 39%, 33%, 47%, 71% |
| Comer et al. [7] | 40 | 1. Walking stick if not using one (20)  
2. No walking stick (20) | ZCQ at 2 weeks: NS differences |
| Cuckler et al. [9] | 37 | 1. ESI + procaine (20)  
2. Saline + procaine (17)  
Both groups ESI if < 50% better | Success = 75% self-reported improvement at  
24 hours and mean 20 months: NS differences |
| Eskola et al. [13] | 40 | 1. Calcitonin then placebo  
2. Placebo then calcitonin | VAS rest pain and jumping, walking distance 1, 3, 4,  
6, 12 months.  
Active stage V placebo: VAS rest (P=0.01); jump pain (P=0.001 / 0.019; walking distance (P=0.007 / 0.14) up to 3 months  
No long term difference. |
| Fukusaki et al. [16] | 53 | 1. Saline epidural injection  
2. Mepivacaine epidural injection  
3. ESI + mepivacaine | Walking distance improvement: 100m (excellent),  
20-100m (good), <20m (poor) at 1 week, 1, 3 months  
2 + 3 V 1 at 1 week (P<0.01); NS at 1 and 3 months |
| Goren et al. [21] | 50 | 1. US + exercise (17)  
2. Sham US + exercise (17)  
3. Control (16) | VAS leg / back, Oswestry, treadmill test, medication after 3 weeks of treatment  
1 + 2 V 3: Leg pain (P<0.007); Oswestry (P<0.014);  
1 V 3: medication (P=0.016)  
1 V 2 = NS differences |
<table>
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<th>Authors</th>
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<tr>
<td>Koc et al. [31]</td>
<td>29</td>
<td>1. In-patient physical therapy (10)</td>
<td>VAS, flexion, treadmill test, sit-to-stand, Roland-Morris (RMD), NHP at 2 weeks, 1, 3, and 6 months 2 v 3 at 2 weeks: VAS (P=0.008); RMD (P=0.007); NHP (P=0.004). SD in all groups. NS 1 V 2.</td>
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<td>2. ESI (10)</td>
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<td>3. Controls (9)</td>
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<td>Kurihara et al. [32]</td>
<td>146</td>
<td>1. Opalman (15 mgd)(^h) (69)</td>
<td>Improvement in sensation, walking distance, leg pain standing pain at 6 months 1 V 2: improvement (P=0.005); improvement in sensation (P=0.008); walking distance (P=0.019).</td>
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<td></td>
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<td>2. Opalman (3 mgd)(^h) (77)</td>
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<td>Lee et al. [33]</td>
<td>99</td>
<td>1. Interlaminar ESI (42)</td>
<td>NRS, Patient Satisfaction Index (PSI), 5-point pain score at 2 weeks, 2 and 4 months 2 V 1 at 2w, 2 and 4m NPRS / pain score (P&lt;0.05)</td>
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<td>2. Bilateral transforaminal ESI (57)</td>
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<td>Malmivaara et al. [35]</td>
<td>94</td>
<td>1. Decompression surgery (50)</td>
<td>Oswestry, NRS, treadmill test at 6, 12, 24 months 1 V 2 entire follow-up period: Oswestry (P=0.01), leg pain walking (P=0.02), LBP walking (P=0.0003)</td>
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<td>2. NSAID, back school, some individualised physical therapy (44)</td>
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<td>Manchikanti et al. [36]</td>
<td>40</td>
<td>1. Caudal ESI + anaesthetic (20)</td>
<td>NRS, Oswestry at 3, 6, 12 months NS differences; SD over time</td>
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<td>2. Caudal epidural anaesthetic (20)</td>
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<tr>
<td>Manchikanti et al. [37]</td>
<td>50</td>
<td>1. Caudal ESI + anaesthetic (25)</td>
<td>NRS, Oswestry at 3, 6, 12 months 2 V 1 entire follow-up period NRS and Oswestry (P&lt;0.0001)</td>
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<td>2. Percutaneous adhesiolysis (25)</td>
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<tr>
<td>Mariconda et al. [38]</td>
<td>44</td>
<td>1 Decompression surgery (22)</td>
<td>Beaujon Scoring System(^g) at 1, 2 years, and mean 47 months: 1 V 2 at 2 years / long-term (P≤0.05 / ≤0.01)</td>
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<td>2. Bed rest, orthosis, physical therapy (22)</td>
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<td>Matsudaira et al. [39]</td>
<td>79</td>
<td>1. Prostaglandin (39)</td>
<td>SF 36, rating scale for back and leg pain and walking distance, improvement, satisfaction at 8 weeks 1 V 2 SF 36 physical functioning, bodily pain,</td>
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<td>2. Etodolac (NSAID) (40)</td>
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<td>Study</td>
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| Ng et al. [40]                | 32^d        | 1. PRI bupivacaine (15)  
2. PRI bupivacaine + steroid (17) | VAS back / leg pain, walking distance at 2, 4, 6, 12 weeks: NS difference in walking distance (only outcome separate data for spinal stenosis) |
| Podichetty et al. [45]        | 55          | 1. Nasal calcitonin (36)  
2. Placebo (19) | VAS, Oswestry, walking distance, SF 36 at 6 weeks: NS differences |
| Porter & Miller [47]          | 42          | 1. Injected calcitonin (20)  
2. Injected saline (placebo) (22) | Walking distance, pain, sleep, mobility, analgesics at 4, 8 weeks: NS differences |
| Pua et al. [48]               | 68          | 1. BWST^b (33)  
2. Cycling^b (35) | Oswestry, Roland-Morris, VAS, patient-rated change at 3, 6 weeks: NS differences, SD over time |
| Sahin et al. [50]             | 45          | 1. Nasal calcitonin^c (23)  
2. Paracetamol^c (22) | VAS, ROM, Roland-Morris, walking distance at 8 weeks: NS differences, SD over time |
| Slatis et al. [53]            | 83          | 1. Decompression surgery (45)  
2. NSAID, back school, some individualised physical therapy (38) | Oswestry, NRS, treadmill test at mean 6 years NS difference; SD over time |
| Tafazal et al. [56]           | 40          | 1. Nasal calcitonin (20)  
2. Placebo (20) | VAS back / leg pain, Oswestry, LBOS, walking distance at 4, 10, 16 weeks: NS differences |
| Tafazal et al. [57]           | 48^d        | 1. PRI bupivacaine (25)  
2. PRI bupivacaine + steroid (23) | VAS back / leg pain, Oswestry, LBOS at 6, 12 weeks 1 year: Oswestry at 3 months (P=0.04) |
| Uratsuji et al. [66]          | 84          | 1. Opalman (30 mgd)^h (29)  
2. Opalman (15 mgd)^h (32) | Self-reported improvement, functional tasks at 6 weeks. NS differences |
3. Opalman (6 mgd)\(^h\) (23)

Waikakul & Waikakul [67] 152  
1. Methylcobalamin (70)  
2. Control (82)  
Both groups – education, strengthening exercises, physical therapy, NSAID.  

Weinstein et al. [69] 304\(^e\)  
1. Decompressive surgery (159)  
2. Usual care\(^i\) (145)  
SF 36, Oswestry at 6 weeks, 3, 6, 12, 24 months:  
NS differences

Weinstein et al. [70] 289\(^e\)  
1. Decompressive surgery (138)  
2. Usual care\(^i\) (151)  
SF 36, Oswestry at 6 weeks, 3, 6, 12, 24 months:  
1 V 2 SF 36 bodily pain at 2 years (P not stated)

Weinstein et al. [71] 304\(^e\)  
1. Decompressive surgery (159)  
2. Usual care\(^i\) (145)  
SF 36, Oswestry at 3, 4 years: NS differences

Whitman et al. [72] 58  
1. MT, BWST, flexion exercises (29)  
2. Flexion exercises, walking, US (29)  
Global rating of change (GRC), Oswestry, NPRS, SSS at 6 weeks, 1 year:  
1 V 2 GRC at 6 weeks (P=0.0015). Other outcomes  
NS differences

Yaksi et al. [74] 55  
1. Flexion / strengthening exercises traction, corset, NSAID (27)  
2. As 1 + gabapentin (28)  
Walking distance, VAS with movement, neurological deficit at 1, 2, 3, 4 months:  
2 V 1 walking distance at 2, 3, 4 months (P=0.03, 0.04, 0.001); VAS at 3, 4 months (P=0.039, 0.006);  
improvement sensory loss at 4 months (P=0.04)

Zucherman et al. [76] 191  
1. Decompression surgery (100)  
2. ESI (NSAID, physical therapy) (91)  
SF 36, ZCQ, ZCS at 6 weeks, 6, 12 months:  
1 V 2 at all time points ZCQ (P not stated), and  
SF 36 (P not stated)

Zucherman et al. [77] 191  
1. Decompression surgery (100)  
ZCQ at 2 years:
2. ESI (NSAID, physical therapy) (91)  1 V 2 all domains of ZCQ (P<0.001)

\( ^a \) = significant differences in bold (with more effective treatment given first)
\( ^b \) = in addition both groups received warm-up (heat, traction) and home flexion exercise programme
\( ^c \) = in addition both groups did exercise programme (heat, flexion and stabilisation exercises)
\( ^d \) = spinal stenosis patients only, trial also included patients with disc herniations
\( ^e \) = in randomised controlled trial, more patients in an observational study
\( ^f \) = physical therapy, ESI, education, home exercises, NSAID
\( ^g \) = combination: walking distance, leg pain rest / exertion, back pain, neurological deficit, medication, quality of life
\( ^h \) = mgd = micrograms per day; Japanese trademark name for prostaglandin E
\( ^i \) = high quality (≥ 6 on PEDro scale) in bold

BWST = body-weight supported treadmill; ESI = epidural steroid injection; LBOS = Low Back Outcome Score; LBP = low back pain; MT = manual therapy; NPRS = Numeric Pain Rating Scale; NRS = Numeric (pain) Rating Scale; NS = not significant; NSAID = non-steroidal anti-inflammatory drugs; PRI = periradicular infiltration; ROM = range of movement; SD = significant difference; SSS = Spinal Stenosis Scale; US = ultrasound; VAS = visual analogue scale; ZCQ = Zurich Claudication Questionnaire; ZCS = Zurich Claudication Score.