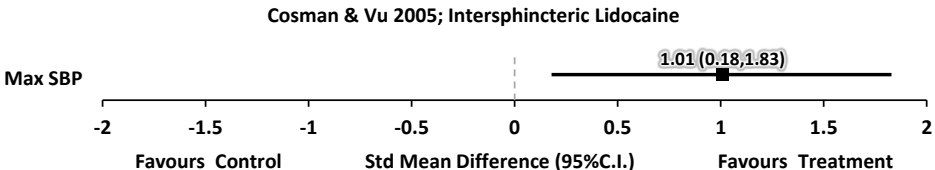
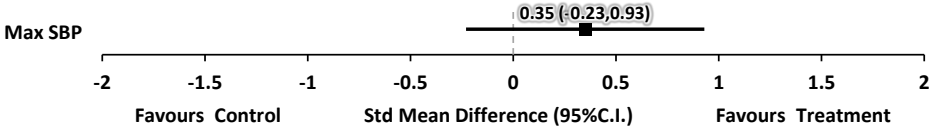
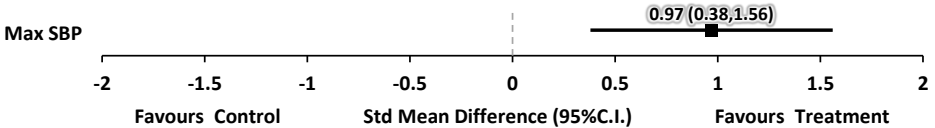


<b>Author Year; Country Score Research Design Sample Size</b>	<b>Methods</b>	<b>Outcome</b>
<p><a href="#">Solinsky &amp; Linsenmeyer 2018</a></p> <p>USA</p> <p>Prospective controlled trial</p> <p>Level 2</p> <p>N=50</p>	<p><b>Population:</b> N=50, treatment group N=27, control group N=23 SCI at or above T6</p> <p><b>Treatment:</b> Treatment group had 10ml of 2% lidocaine hydrochloride gel instilled through a catheter. BP was recorded every 30-60 seconds for 4-6 minutes. The catheter was changed per normal sterile protocol and immediate BP was taken within the first 30 seconds. Control group had baseline BP taken at routine catheter change. Catheter was removed and 10ml of 2% lidocaine was injected prior to immediate placement of new catheter. Anaesthetic effects of intravesical lidocaine were assumed not to act in this group based on results from previous studies. BP was taken after catheter change.</p> <p><b>Outcome measures:</b> BP</p>	<ol style="list-style-type: none"> <li>1. Treatment group: four individuals out of 27 (14.8%) experienced AD with the catheter change.</li> <li>2. Control group: the rate of AD was 47.8%.</li> <li>3. There is a significant decrease in AD incidence following pretreatment with lidocaine (p=0.011).</li> <li>4. The mean increase in SBP following catheter change from baseline for the treatment group was 9.5 mmHg. This was significantly less than the increase experienced by individuals in the control group (26.9 mmHg, P=.014).</li> <li>5. After receiving intravesical lidocaine, 14 individuals in the treatment group experienced decreased SBP when comparing baseline to SBP at the time of catheter change (mean SBP prior to catheter change of 110 mmHg for treatment group).</li> </ol>
<p><a href="#">Cosman &amp; Vu 2005</a></p> <p>USA</p> <p>PEDro=11</p> <p>RCT</p>	<p><b>Population:</b> All participants with complete SCI; age 46-49 years; 15-25 years post-injury; level of injury: C4-T1</p>	<ol style="list-style-type: none"> <li>1. The mean maximal systolic blood pressure increase for the lidocaine group (22(14) mmHg) was lower than the placebo group (47(31) mmHg) suggesting that AD risk was reduced with lidocaine.</li> </ol>

Author Year; Country Score Research Design Sample Size	Methods	Outcome
Level 1 N=25	<p><b>Treatment:</b> intersphincteric anal block with either: a) 300 mg 1% lidocaine or b) normal saline (placebo) before sigmoidoscopy or anoscopic hemorrhoid ligation procedure.</p> <p><b>Outcome Measures:</b> blood pressure.</p>	
	<p><b>Effect Sizes:</b> Forest plot of standardized mean differences (SMD <math>\pm</math> 95%C.I.) as calculated from pre- and post-intervention data</p> <p style="text-align: center;">Cosman &amp; Vu 2005; Intersphincteric Lidocaine</p>  <p style="text-align: center;">95% C.I. based on SD of pre-post difference</p>	
<a href="#">Cosman et al. 2002</a> USA PEDro=9 RCT Level 1 N=45	<p><b>Population:</b> 45 patients (44 male, 1 female) with chronic, complete SCI, injury level of T6 or above, undergoing anoscopy and/or flexible sigmoidoscopies.</p> <p><b>Treatment:</b> a) 2% topical lidocaine jelly (n=18) or; b) nonmedicated lubricant (control, n=32) just prior to the procedure.</p> <p><b>Outcome Measures:</b> blood pressure.</p>	<ol style="list-style-type: none"> <li>1. Topical lidocaine had no significant effect on mean maximal systolic blood pressure (increased 35(25) mmHg in the lidocaine group vs. 45(30) mmHg in the control group).</li> <li>2. Greater SBP increase with anoscopic procedure compared to sigmoidoscopic procedures (49(29) vs. 25(20) mmHg, respectively).</li> </ol>
	<p><b>Effect Sizes:</b> Forest plot of standardized mean differences (SMD <math>\pm</math> 95%C.I.) as calculated from pre- and post-intervention data</p>	

<b>Author Year; Country Score Research Design Sample Size</b>	<b>Methods</b>	<b>Outcome</b>
		<p style="text-align: center;"><b>Cosman et al. 2002; Topical Lidocaine</b></p>  <p style="text-align: center;">95% C.I. based on SD of pre-post difference</p>
<p><a href="#">Furusawa et al. 2009</a> Japan PEDro=8 RCT Level 1 N=25</p>	<p><b>Population:</b> 25 individuals with cervical SCI (22 men, 3 women); Level of injury: C4-C7; mean(SD) time post-injury: 23.4(36.4), range 3-172 months.</p> <p><b>Treatment:</b> 10mL of 2% Lidocaine treatment group (placebo jelly for control group); both groups then underwent digital bowel stimulation to initiate and augment stool flow.</p> <p><b>Outcome Measures:</b> blood pressure; heart rate; symptoms of autonomic dysreflexia.</p>	<ol style="list-style-type: none"> <li>10 participants in the control group reported symptoms of AD, compared to 4 patients in the treatment group.</li> <li>Systolic blood pressure was significantly lower in treatment group, compared to the control.</li> <li>No significant difference in diastolic blood pressure or heart rate.</li> </ol> <p><b>Effect Sizes:</b> Forest plot of standardized mean differences (SMD <math>\pm</math> 95% C.I.) as calculated from pre- and post-intervention data</p> <p style="text-align: center;"><b>Furusawa et al. 2009; Topical Lidocaine</b></p>  <p style="text-align: center;">95% C.I. based on SD of pre-post difference</p>