

Alpha-2-adrenergic antagonists study details

reference	participants' characteristics	intervention group/ control group	outcomes	critical appraisal/ conclusion																																																																																																										
<p><a href="#">Samantaray et al. 2012</a> The effect on post-operative pain of IV clonidine given before induction of anaesthesia. Indian J Anaesth. 2012 Jul-Aug; 56(4): 359–364.</p>	<p><b>inclusion criteria</b> - age 18–70 yrs - ASA physical status I–III <b>exclusion criteria</b> - age &lt;18 or &gt;70 yrs - weight &gt;100 kg - symptomatic coronary artery disease - severe respiratory dysfunction - chronic opioid use - abnormal renal or hepatic function - inability to understand and use the visual analogue scale (VAS) - pregnant or breast feeding <b>demographic data:</b></p> <table border="1"> <thead> <tr> <th></th> <th>C</th> <th>P</th> <th>p</th> </tr> </thead> <tbody> <tr> <td>age (yrs)</td> <td>48.4 (9.2)</td> <td>45.6 (6.3)</td> <td>0.188</td> </tr> <tr> <td>sex (m/f)</td> <td>16/14</td> <td>14/14</td> <td>0.504</td> </tr> <tr> <td>weight (kg)</td> <td>59.9 (7.2)</td> <td>57.1 (7.0)</td> <td>0.149</td> </tr> <tr> <td>ASA (I/II/III) (n)</td> <td>21/6/3</td> <td>24/6/2</td> <td>0.311</td> </tr> </tbody> </table> <p><b>patient flow and follow up:</b> <u>total patient number included:</u> 60 <u>randomised in:</u> group C: 30 group P: 30 <u>excluded:</u> 2 <u>analysed:</u> 58 <u>follow-up:</u> 24 h post op: VAS on coughing and total fentanyl consumption</p>		C	P	p	age (yrs)	48.4 (9.2)	45.6 (6.3)	0.188	sex (m/f)	16/14	14/14	0.504	weight (kg)	59.9 (7.2)	57.1 (7.0)	0.149	ASA (I/II/III) (n)	21/6/3	24/6/2	0.311	<p><b>intervention prior to anaesthesia</b> - group C (clonidine group): patients received IV clonidine 3 µg/kg diluted with 50 mL normal saline and infused with a syringe pump over 30 min before surgery - group P (placebo group): same protocol using placebo <b>intra-op analgesia</b> - 20 min before the end of surgery, 2 µg/kg fentanyl, IV <b>mode of anaesthesia</b> - fentanyl 3 µg/kg, midazolam 0.05 mg/kg and thiopentone 3–5 mg/kg <b>postoperative analgesia</b> - diclofenac 75 mg IM (in PACU) then at 12 h intervals for the first day, PO at 8 h for the 2nd day <b>rescue analgesia</b> - if VAS&gt;4, 1 µg/kg fentanyl IV repeated every 10 min <b>surgical approach</b> - not reported <b>supplemental analgesia</b> - fentanyl 1 µg/kg IV</p>	<p><b>postoperative pain [VAS on cough]:</b> median (interquartile range)</p> <table border="1"> <thead> <tr> <th></th> <th>C</th> <th>P</th> <th>p</th> </tr> </thead> <tbody> <tr> <td>FAI</td> <td>64 (40)</td> <td>69 (30)</td> <td>0.024</td> </tr> <tr> <td>30 min</td> <td>40 (60)</td> <td>40 (61)</td> <td>0.048</td> </tr> <tr> <td>60 min</td> <td>30 (17)</td> <td>35 (23)</td> <td>0.025</td> </tr> <tr> <td>120 min</td> <td>32 (31)</td> <td>35 (14)</td> <td>0.034</td> </tr> <tr> <td>180 min</td> <td>28.5 (25)</td> <td>30 (33)</td> <td>0.102</td> </tr> <tr> <td>240 min</td> <td>24.5 (43)</td> <td>28 (13)</td> <td>0.735</td> </tr> <tr> <td>24 h</td> <td>22 (24)</td> <td>23 (26)</td> <td>0.175</td> </tr> </tbody> </table> <p>FAI: First analgesic injection on demand in PACU <b>total fentanyl consumption</b> Fentanyl consumption (µg)</p> <table border="1"> <thead> <tr> <th></th> <th>C</th> <th>P</th> <th>p</th> </tr> </thead> <tbody> <tr> <td>FAI</td> <td>60 (180)</td> <td>110 (180)</td> <td>0.041</td> </tr> <tr> <td>30 min</td> <td>120 (240)</td> <td>150 (240)</td> <td>0.069</td> </tr> <tr> <td>60 min</td> <td>120 (240)</td> <td>150 (240)</td> <td>0.055</td> </tr> <tr> <td>120 min</td> <td>120 (240)</td> <td>150 (290)</td> <td>0.057</td> </tr> <tr> <td>180 min</td> <td>120 (240)</td> <td>150 (410)</td> <td>0.034</td> </tr> <tr> <td>240 min</td> <td>120 (240)</td> <td>150 (410)</td> <td>0.011</td> </tr> <tr> <td>24 h</td> <td>120 (240)</td> <td>150 (410)</td> <td>0.042</td> </tr> </tbody> </table> <p><b>time to first analgesic request [min]:</b> <b>mean±SD</b></p> <table border="1"> <thead> <tr> <th></th> <th>C</th> <th>P</th> <th>S</th> </tr> </thead> <tbody> <tr> <td></td> <td>63.6 (22.3)</td> <td>38 (27.3)</td> <td>S</td> </tr> </tbody> </table> <p><b>supplementary fentanyl (µg): mean±SD</b></p> <table border="1"> <thead> <tr> <th></th> <th>C</th> <th>P</th> <th>S</th> </tr> </thead> <tbody> <tr> <td></td> <td>35.3 (35.9)</td> <td>55.7 (33.9)</td> <td>S</td> </tr> </tbody> </table> <p><b>total adverse effects (vomiting): (n)</b></p> <table border="1"> <thead> <tr> <th></th> <th>C</th> <th>P</th> </tr> </thead> <tbody> <tr> <td></td> <td>1</td> <td>6</td> </tr> </tbody> </table>		C	P	p	FAI	64 (40)	69 (30)	0.024	30 min	40 (60)	40 (61)	0.048	60 min	30 (17)	35 (23)	0.025	120 min	32 (31)	35 (14)	0.034	180 min	28.5 (25)	30 (33)	0.102	240 min	24.5 (43)	28 (13)	0.735	24 h	22 (24)	23 (26)	0.175		C	P	p	FAI	60 (180)	110 (180)	0.041	30 min	120 (240)	150 (240)	0.069	60 min	120 (240)	150 (240)	0.055	120 min	120 (240)	150 (290)	0.057	180 min	120 (240)	150 (410)	0.034	240 min	120 (240)	150 (410)	0.011	24 h	120 (240)	150 (410)	0.042		C	P	S		63.6 (22.3)	38 (27.3)	S		C	P	S		35.3 (35.9)	55.7 (33.9)	S		C	P		1	6	<p><b>methodological shortcomings</b> - method used to implement the random allocation sequence not reported - not reported how the sequence was concealed until interventions were assigned - dates defining the period of recruitment and follow-up not reported - number of participants (denominator) in each group included in each analysis and whether the analysis was by "intention to treat" not reported. - results not reported in absolute numbers - for each primary and secondary outcome, a summary of results was not reported for each group with the estimated effect size and its precision <b>level of evidence: 1</b> <b>authors' conclusion</b> "A single IV dose of clonidine (3 µg/kg) given before induction of anaesthesia significantly reduced the post-operative VAS score in the initial period and fentanyl consumption during 24 h after thoracic surgery"</p>
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