

### 309. Comparative benefits of epidural analgesia following hysterectomy and colonic resection

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**Background:** Treatment of postoperative pain is most effective when delivered using procedure-specific criteria, taking into account the type of surgical procedure, patient co-morbidities and the risks and benefits of different analgesic regimens.<sup>1</sup> This systematic review examines the comparative benefits of epidural *versus* systemic analgesia following hysterectomy and colonic resection.

**Methods:**

1. Systematic literature review using the Cochrane Collaboration protocol (MEDLINE, EmBASE, 1966–Jan 2004)
2. Selection of randomised trials of analgesic interventions in hysterectomy and colonic resection, reporting pain on a linear scale (0–100)
3. Qualitative and quantitative analyses of selected studies

**Results:**

Studies compared epidural strong opioid, local anaesthetic or both with systemic analgesia

Postoperative outcomes	Number of studies:			Quantitative analyses Epidural vs. systemic (weighted mean difference, WMD)
	Reporting outcome	Showing significant benefit of epidural	Showing non-significant result	
<b>Hysterectomy, n=5</b>				
Pain score	5	2	3	4 h, n=3, WMD -12.52 [-22.97, -2.07], p=0.02 20 h, n=3, WMD -6.30 [-14.64, 2.05], p=0.14
Opioid use	3	2	1	nd
Time to flatus	1	0	1	nd
Time to bowel movement	1	0	1	nd
Ileus	0	nd	nd	nd
Hospital stay	1	0	1	nd
<b>Colonic resection, n=8</b>				
Pain score	8	8	0	3–8 h, n=2+2 arms, WMD -19.42 [-24.36, -14.47], p<0.00001 24 h, n=4+2 arms, WMD -14.71 [-19.61, -9.80], p<0.00001
Opioid use	4	4	0	nd
Time to flatus	3	3	0	nd
Time to bowel movement	5	5	0	n=2+2 arms, WMD -0.98 [-1.58, -0.37], p=0.002
Ileus	1	0	1	nd
Hospital stay	6	0	6	nd

nd=no data

**Conclusions and discussion:**

Epidural analgesia was effective for reducing postoperative pain and opioid use following both hysterectomy and colonic resection. However, these results were clinically meaningful only for colonic resection. In addition, a significant reduction in the time to recovery of bowel motility with epidural analgesia was shown only for colonic resection.