| **PICO #5. A thoracic epidural catheter and structured multi-modal pain therapy per institutional protocol compared to structured multi-modal pain therapy per institutional protocol alone for adults age >65 years old s with ≥3 rib fractures and dyspnea or refractory pain**  **Bibliography:** | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Certainty assessment** | | | | | | | **Summary of findings** | | | | |
| **Participants (studies) Follow-up** | **Risk of bias** | **Inconsistency** | **Indirectness** | **Imprecision** | **Publication bias** | **Overall certainty of evidence** | **Study event rates (%)** | | **Relative effect (95% CI)** | **Anticipated absolute effects** | |
| **With structured multi-modal pain therapy per institutional protocol alone** | **With a thoracic epidural catheter and structured multi-modal pain therapy per institutional protocol** | **Risk with structured multi-modal pain therapy per institutional protocol alone** | **Risk difference with a thoracic epidural catheter and structured multi-modal pain therapy per institutional protocol** |
| **Pneumonia** | | | | | | | | | | | |
| 98 (3 RCTs) | seriousa | not seriousb | seriousc | not serious | none | ⨁⨁◯◯ Low | 13/51 (25.5%) | 6/47 (12.8%) | **OR 0.37** (0.12 to 1.15) | 255 per 1,000 | **143 fewer per 1,000** (from 215 fewer to 27 more) |
| **Mortality** | | | | | | | | | | | |
| 66 (2 RCTs) | seriousa | seriousb | seriousc | not serious | none | ⨁◯◯◯ Very low | 2/34 (5.9%) | 2/32 (6.3%) | **OR 1.11** (0.15 to 8.09) | 59 per 1,000 | **6 more per 1,000** (from 50 fewer to 277 more) |
| **Hospital Length of Stay (days)** | | | | | | | | | | | |
| 261 (3 RCTs) | seriousa | seriousb | seriousc | not serious | none | ⨁◯◯◯ Very low | 171 | 90 | - | The mean hospital Length of Stay (days) was **0** | MD **9.12 lower** (30.14 lower to 11.9 higher) |
| **Ventilator Days** | | | | | | | | | | | |
| 94 (3 RCTs) | seriousa | seriousb | seriousc | not serious | none | ⨁◯◯◯ Very low | 47 | 47 | - | The mean ventilator Days was **0** | MD **6.97 lower** (16.59 lower to 2.65 higher) |

**CI:** confidence interval; **MD:** mean difference; **OR:** odds ratio

#### Explanations

a. Poor standardization of the non-epidural pain regimen

b. High levels of heterogeneity between studies

c. Age is significantly younger than the population in the PICO question