**Supplemental Table 1**. Search strings.

|  |  |  |  |
| --- | --- | --- | --- |
| Sr.no | Search string | Database | Results |
| 1 | (("Hip Fractures/surgery"[MAJR]) AND "Anesthesia, General/adverse effects"[MAJR]) OR "Anesthesia, General/mortality" [MAJR] | PubMed | 213 |
| Embase | 3 |
| Cochrane | 1 |
| 2 | "Hip Fractures" AND "surgery" AND "spinal anesthesia" | PubMed | 195 |
| Embase | 104 |
| Cochrane | 85 |
| 3 | (("Hip Fractures/surgery"[MAJR]) AND ("Anesthesia, General"[MAJR] OR "Anesthesia, Spinal"[MAJR])) | PubMed | 168 |
| Embase | 2 |
| Cochrane | 2 |
| 4 | ("Hip Fractures/surgery" [MAJR]) AND "spinal anesthesia" | PubMed | 153 |
| Embase | 2 |
| Cochrane | 5 |
| 5 | ("Hip Fractures/surgery"[MAJR]) AND "Anesthesia, Conduction/adverse effects"[MAJR]) OR "Anesthesia. Conduction/mortality"[MAJR] | PubMed | 144 |
| Embase | 1 |
| Cochrane | 1 |
| 6 | ("Anesthesia/methods"[MAJR]) AND "Hip Fractures/surgery"[MAJR] | PubMed | 141 |
| Embase | 0 |
| Cochrane | 0 |
| 7 | "Hip Fractures" AND "surgery" AND "Anesthesia, General" | PubMed | 125 |
| Embase | 3 |
| Cochrane | 21 |
| 8 | Intertrochanteric femur fractures AND "hip fractures" AND "anesthesia"] | PubMed | 109 |
| Embase | 0 |
| Cochrane | 0 |
| 9 | ("Hip Fractures/surgery"[MAJR]) AND "Anesthesia, Spinal"[MAJR] | PubMed | 107 |
| Embase | 2 |
| Cochrane | 1 |
| 10 | ("Hip Fractures/surgery"[MAJR]) AND ("Nerve Block/methods"[MeSH] OR "Nerve Block/adverse effects"[MeSH])) | PubMed | 79 |
| Embase | 0 |
| Cochrane | 3 |
| 11 | "Hip Fractures" AND "surgery" AND "Anesthesia, General" AND "Mortality" | PubMed | 70 |
| Embase | 2 |
| Cochrane | 14 |
| 12 | "Anesthesia, Spinal"[MAJR] AND femoral neck fractures | PubMed | 69 |
| Embase | 38 |
| Cochrane | 29 |
| 13 | femoral neck fractures AND "hip fractures" AND "anesthesia" | PubMed | 60 |
| Embase | 146 |
| Cochrane | 43 |
| 14 | "Hip Fractures" AND "surgery" AND "Anesthesia, General" AND "Postoperative Complications" | PubMed | 55 |
| Embase | 0 |
| Cochrane | 14 |
| 15 | ("Hip Fractures/surgery"[MAJR]) AND "Length of Stay"[MeSH] AND "Anesthesia" | PubMed | 44 |
| Embase | 1 |
| Cochrane | 6 |
| 16 | "Hip Fractures" AND "surgery" AND "Anesthesia, Epidural" | PubMed | 41 |
| Embase | 0 |
| Cochrane | 6 |
| 17 | "Hip Fractures" AND "surgery" AND "Anesthesia, General" AND "Pain" | PubMed | 27 |
| Embase | 0 |
| Cochrane | 9 |
| 18 | "Hip Fractures" AND "surgery" AND "Anesthesia, General" AND "Treatment Outcome" | PubMed | 25 |
| Embase | 1 |
| Cochrane | 4 |
| 19 | "Hip Fractures" AND "surgery" AND "Anesthesia, Epidural" AND "Mortality" | PubMed | 24 |
| Embase | 0 |
| Cochrane | 5 |
| 20 | "Hip Fractures" AND "surgery" AND "Anesthesia, General" AND "Morbidity" | PubMed | 22 |
| Embase | 0 |
| Cochrane | 7 |
| 21 | "Hip Fractures/surgery" AND "Anesthesia, Epidural" AND "Pain" | PubMed | 18 |
| Embase | 0 |
| Cochrane | 2 |
| 22 | "Hip Fractures" AND "surgery" AND "Anesthesia, Epidural" AND "Treatment Outcome" | PubMed | 8 |
| Embase | 0 |
| Cochrane | 1 |
| 23 | "Hip Fractures" AND "surgery" AND "Anesthesia, Epidural" AND "Postoperative Complications" | PubMed | 8 |
| Embase | 0 |
| Cochrane | 2 |
| 24 | "Anesthesia, Spinal"[MAJR] AND intertrochanteric femur fractures | PubMed | 3 |
| Embase | 0 |
| Cochrane | 0 |
|  |  | **Total** | **2474** |

**Table 1.** Search strings used for systematic review in all three databases.

**Supplemental Figure 2.** General anesthesia vs. spinal/regional mean differences in age. CI, confidence interval; GA, general anesthesia; MD, mean difference; SD, standard deviation; S/R, spinal/regional anesthesia.

Chart, box and whisker chart

Description automatically generated

**Supplemental Figure 3.** General anesthesia vs. spinal/regional mean differences in body mass index. CI, confidence interval; GA, general anesthesia; MD, mean difference; SD, standard deviation; S/R, spinal/regional anesthesia.

Chart, box and whisker chart

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**Supplemental Figure 4.** General anesthesia vs. spinal/regional odds ratios of female sex. CI, confidence interval; GA, general anesthesia; OR, odds ratio; S/R, spinal/regional anesthesia.

Chart

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**Supplemental Figure 5.** General anesthesia vs. spinal/regional odds ratios of hypertension. CI, confidence interval; GA, general anesthesia; OR, odds ratio; S/R, spinal/regional anesthesia.

Chart, box and whisker chart

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**Supplemental Figure 6.** General anesthesia vs. spinal/regional odds ratios of cardiovascular disease. CI, confidence interval; GA, general anesthesia; OR, odds ratio; S/R, spinal/regional anesthesia.

Chart, box and whisker chart

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**Supplemental Figure 7.** General anesthesia vs. spinal/regional odds ratios of myocardial infarction. CI, confidence interval; GA, general anesthesia; OR, odds ratio; S/R, spinal/regional anesthesia.

Chart, box and whisker chart

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**Supplemental Figure 8.** General anesthesia vs. spinal/regional odds ratios of stroke. CI, confidence interval; GA, general anesthesia; OR, odds ratio; S/R, spinal/regional anesthesia.

Chart, box and whisker chart

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**Supplemental Figure 9.** General anesthesia vs. spinal/regional odds ratios of diabetes mellitus. CI, confidence interval; GA, general anesthesia; OR, odds ratio; S/R, spinal/regional anesthesia.

Chart, box and whisker chart

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**Supplemental Figure 10.** General anesthesia vs. spinal/regional odds ratios of respiratory disease. CI, confidence interval; GA, general anesthesia; OR, odds ratio; S/R, spinal/regional anesthesia.

Chart, box and whisker chart

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**Supplemental Figure 11.** General anesthesia vs. spinal/regional odds ratios of delirium. CI, confidence interval; GA, general anesthesia; OR, odds ratio; S/R, spinal/regional anesthesia.

Chart

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**Supplemental Figure 12.** General anesthesia vs. spinal/regional odds ratios of dementia. CI, confidence interval; GA, general anesthesia; OR, odds ratio; S/R, spinal/regional anesthesia.

Chart, box and whisker chart

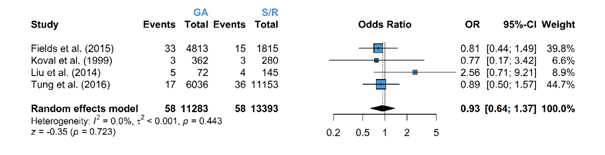
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**Supplemental Figure 13.** General anesthesia vs. spinal/regional odds ratios of renal disease. CI, confidence interval; GA, general anesthesia; OR, odds ratio; S/R, spinal/regional anesthesia.

Chart, box and whisker chart

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**Supplemental Figure 14.** General anesthesia vs. spinal/regional odds ratios of stroke. CI, confidence interval; GA, general anesthesia; OR, odds ratio; S/R, spinal/regional anesthesia.



**Supplemental Figure 15.** General anesthesia vs. spinal/regional odds ratios of delirium. CI, confidence interval; GA, general anesthesia; OR, odds ratio; S/R, spinal/regional anesthesia.

Chart, box and whisker chart

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**Supplemental Figure 16.** General anesthesia vs. spinal/regional odds ratios of respiratory events. CI, confidence interval; GA, general anesthesia; OR, odds ratio; S/R, spinal/regional anesthesia.

Chart, box and whisker chart

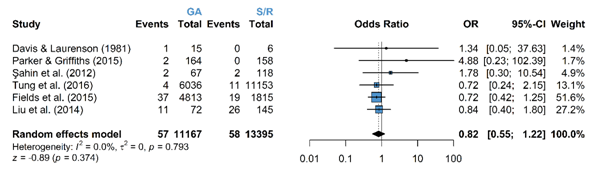
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**Supplemental Figure 17.** General anesthesia vs. spinal/regional odds ratios of myocardial infarction. CI, confidence interval; GA, general anesthesia; OR, odds ratio; S/R, spinal/regional anesthesia.

Chart, box and whisker chart

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**Supplemental Figure 18.** General anesthesia vs. spinal/regional odds ratios of renal events. CI, confidence interval; GA, general anesthesia; OR, odds ratio; S/R, spinal/regional anesthesia.



**Supplemental Figure 19.** General anesthesia vs. spinal/regional odds ratios of wound/surgery site infections. CI, confidence interval; GA, general anesthesia; OR, odds ratio; S/R, spinal/regional anesthesia.

Chart, box and whisker chart

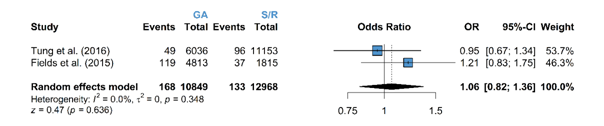
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**Supplemental Figure 20.** General anesthesia vs. spinal/regional odds ratios of general infections. CI, confidence interval; GA, general anesthesia; OR, odds ratio; S/R, spinal/regional anesthesia.

Chart, box and whisker chart

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**Supplemental Figure 21.** General anesthesia vs. spinal/regional odds ratios of sepsis. CI, confidence interval; GA, general anesthesia; OR, odds ratio; S/R, spinal/regional anesthesia.



**Supplemental Figure 22.** General anesthesia vs. spinal/regional odds ratios of deep vein thrombosis. CI, confidence interval; GA, general anesthesia; OR, odds ratio; S/R, spinal/regional anesthesia.

Chart, box and whisker chart

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