# Risk of bias

**Mostafa2020[12] (ClinicalTrials.gov ID: NCT03412474).**

| Bias | Authors' judgement | Support for judgement |
|---|---|---|
| Random sequence generation (selection bias) | Low risk | A computer-generated program of random numbers |
| Allocation concealment (selection bias) | unclear | Not mentioned |
| Blinding of participants and personnel (performance bias) All outcomes | Low risk | Neither the doctors (investigators) nor the patients' guardians or even the children themselves were aware of the group al- location and the drug received. One anesthesiologist not involved in the block implementation or the data collection, prepared all the study solutions. |
| Blinding of outcome assessment (detection bias) All outcomes | Low risk | While a third, blinded to the previous protocol, was responsible only for data collection. |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | No loss to follow-up |
| Selective reporting (reporting bias) | Low risk | The authors provided results for all measurements for 80 patients |
| Other bias | Low risk | Groups well balanced |

**El-Emam2019**[13] Clinical Trials.gov (NCT03480607)

| Bias | Authors' judgement | Support for judgement |
|---|---|---|
| Random sequence generation (selection bias) | Low risk | computer-generated randomization numbers |
| Allocation concealment (selection bias) | Low risk | a closed-seal envelope |
| Blinding of participants and personnel (performance bias) All outcomes | High risk | The principal investigator prepared the drug and performed the block |
| Blinding of outcome assessment (detection bias) All outcomes | Low risk | the person observing and recording the parameters was blinded to the study. |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | No loss to follow-up |
| Selective reporting (reporting bias) | High risk | The primary outcome was to compare both groups regarding time to first rescue analgesic, while the primary outcomes in the pre-registration site were postoperative FLACC scale and postoperative sedation score. |
| Other bias | Low risk | Groups well balanced |

**Obayah2010[14]**

| Bias | Authors' judgement | Support for judgement |
|---|---|---|
| Random sequence generation (selection bias) | Unclear risk | "randomly allocated", no details |
| Allocation concealment (selection bias) | Low risk | The randomization was achieved by the opening of a sealed envelope by the attending physician |
| Blinding of participants and personnel (performance bias) All outcomes | High risk | Not mentioned |
| Blinding of outcome assessment (detection bias) All outcomes | High risk | Not mentioned. |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | No loss to follow-up |
| Selective reporting (reporting bias) | Low risk | The authors provided results for all measurements for 30 patients |
| Other bias | Low risk | Groups well balanced |

**Peng2015**[15] Chinese Clinical Trial Register (ChiCTR-TRC-13003865).

| Bias | Authors' judgement | Support for judgement |
|---|---|---|
| Random sequence generation (selection bias) | Low risk | Randomly divided with a computer-generated sequence of numbers |
| Allocation concealment (selection bias) | Low risk | a sealed envelop |
| Blinding of participants and personnel (performance bias) All outcomes | High risk | Not mentioned |
| Blinding of outcome assessment (detection bias) All outcomes | High risk | Not mentioned. |
| Incomplete outcome data (attrition bias) All outcomes | High risk | The actual sample was 40 while the planned sample in the pre-registration site was 60. |
| Selective reporting (reporting bias) | High risk | The primary outcome was to compare both groups regarding emergence agitation and time about recovery parameters while the primary outcomes in the pre-registration site were heart rate and blood pressure. |
| Other bias | Low risk | Groups well balanced |

**Boku2015**[16] (UMIN 000009869) http://upload.umin.ac.jp.

| Bias | Authors' judgement | Support for judgement |
|---|---|---|
| Random sequence generation (selection bias) | Low risk | A computer-generated random number table |
| Allocation concealment (selection bias) | Unclear risk | Not mentioned. |
| Blinding of participants and personnel (performance bias) All outcomes | Low risk | The patient' s parents and the attending anesthesiologist were blinded to the group allocation |
| Blinding of outcome assessment (detection bias) All outcomes | Low risk | Data for each patient were obtained by the blinded anesthesiologist. |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | No loss to follow-up |
| Selective reporting (reporting bias) | Unclear risk | Do not get the protocol |
| Other bias | Low risk | Groups well balanced |

**Surana2017**[17]

| Bias | Authors' judgement | Support for judgement |
|---|---|---|
| Random sequence generation (selection bias) | Low risk | a computer-generated randomized chart |
| Allocation concealment (selection bias) | Low risk | The random group assignments were enclosed in a sealed opaque envelope |
| Blinding of participants and personnel (performance bias) All outcomes | Low risk | the surgeons, the patients, and the anesthesiologist in the post-anesthesia care unit (PACU) were all blinded |
| Blinding of outcome assessment (detection bias) All outcomes | Low risk | Data was recorded by a blinded observer. |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | No loss to follow-up |
| Selective reporting (reporting bias) | Low risk | The authors provided results for all measurements for 60 patients |
| Other bias | Low risk | Groups well balanced |

**Luo2017[18]**

| Bias | Authors' judgement | Support for judgement |
|---|---|---|
| Random sequence generation (selection bias) | Low risk | a computer-generated table of random numbers |
| Allocation concealment (selection bias) | Unclear risk | Not mentioned. |
| Blinding of participants and personnel (performance bias) All outcomes | Low risk | All pharmacological agents used in the present study were prepared and administrated by the anesthesiologists who were blinded to the details of the study. |
| Blinding of outcome assessment (detection bias) All outcomes | Low risk | Pediatric Anesthesia Emergence Delirium and CHIPPS scores were documented by a well-trained PACU nurse who was blinded to the study. |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | 4 patients from group DS and 3 patients from group SF were excluded from the analysis |
| Selective reporting (reporting bias) | Low risk | The authors provided results for all measurements for 93 patients |
| Other bias | High risk | Groups well balanced. Not in intention-to-treat: Of the 100 patients admitted to the study, 7 were later excluded by the authors for the reasons listed in table II, leaving data from 93 patients for consideration |

**Mei2014[19]**

| Bias | Authors' judgement | Support for judgement |
|---|---|---|
| Random sequence generation (selection bias) | Low risk | a table of random numbers, no detail |
| Allocation concealment (selection bias) | Unclear risk | Not mentioned. |
| Blinding of participants and personnel (performance bias) All outcomes | High risk | Not mentioned. |
| Blinding of outcome assessment (detection bias) All outcomes | High risk | Not mentioned. |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | No loss to follow-up. |
| Selective reporting (reporting bias) | Low risk | The authors provided results for all measurements for 60 patients |
| Other bias | Low risk | Groups well balanced. |

**Xiao2012[20]**

| Bias | Authors' judgement | Support for judgement |
|---|---|---|
| Random sequence generation (selection bias) | High risk | randomized according to the operation time sequence |
| Allocation concealment (selection bias) | Unclear risk | Not mentioned. |
| Blinding of participants and personnel (performance bias) All outcomes | High risk | Not mentioned. |
| Blinding of outcome assessment (detection bias) All outcomes | High risk | Not mentioned. |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | No loss to follow-up. |
| Selective reporting (reporting bias) | Low risk | The authors provided results for all measurements for 54 patients |
| Other bias | Low risk | Groups well balanced. |

**Xi2012[21]**

| Bias | Authors' judgement | Support for judgement |
|---|---|---|
| Random sequence generation (selection bias) | Unclear risk | Random mentioned, no detail |
| Allocation concealment (selection bias) | Unclear risk | Not mentioned. |
| Blinding of participants and personnel (performance bias) All outcomes | High risk | Not mentioned. |
| Blinding of outcome assessment (detection bias) All outcomes | High risk | Not mentioned. |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | No loss to follow-up. |
| Selective reporting (reporting bias) | High risk | Lack of complications, such as postoperative hoarseness, nausea and vomiting |
| Other bias | Low risk | Groups well balanced. |

**Yun2016[22]**

| Bias | Authors' judgement | Support for judgement |
|---|---|---|
| Random sequence generation (selection bias) | Low risk | a table of random numbers, no detail |
| Allocation concealment (selection bias) | Unclear risk | Not mentioned. |
| Blinding of participants and personnel (performance bias) All outcomes | Low risk | A blinded anesthesia nurse prepared and administrated drugs |
| Blinding of outcome assessment (detection bias) All outcomes | High risk | Not mentioned. |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | No loss to follow-up. |
| Selective reporting (reporting bias) | Low risk | The authors provided results for all measurements for 120 patients |
| Other bias | Low risk | Groups well balanced. |

**Ju2013[23]**

| Bias | Authors' judgement | Support for judgement |
|---|---|---|
| Random sequence generation (selection bias) | Unclear risk | Mentioned random, no detail |
| Allocation concealment (selection bias) | Unclear risk | Not mentioned. |
| Blinding of participants and personnel (performance bias) All outcomes | High risk | Not mentioned. |
| Blinding of outcome assessment (detection bias) All outcomes | High risk | Not mentioned. |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | No loss to follow-up. |
| Selective reporting (reporting bias) | Low risk | The authors provided results for all measurements for 80 patients |
| Other bias | Low risk | Groups well balanced. |

**Jun2018**[24]

| Bias | Authors' judgement | Support for judgement |
|---|---|---|
| Random sequence generation (selection bias) | Low risk | Compute randomized |
| Allocation concealment (selection bias) | Unclear risk | Not mentioned. |
| Blinding of participants and personnel (performance bias) All outcomes | High risk | Not mentioned. |
| Blinding of outcome assessment (detection bias) All outcomes | High risk | Not mentioned. |
| Incomplete outcome data (attrition bias) All outcomes | Low risk | No loss to follow-up. |
| Selective reporting (reporting bias) | High risk | The secondary outcomes were to compare both groups regarding extubation time and incision bleeding which were not mentioned in method. |
| Other bias | Low risk | Groups well balanced. |