Anesthesia for evacuation of incomplete miscarriage

19 May 2016

Key findings

The review evaluated the effectiveness of general anesthesia, sedation or analgesia, regional or paracervical block anesthetic techniques for surgical evacuation of incomplete miscarriage.

Key findings from this review are:

- Availability, effectiveness, safety, side effects, practitioner’s choice, costs, and women’s preference of techniques should be continued to be considered until further evidence is available.
- Opioids resulted in more frequent postoperative nausea and vomiting as compared to paracervical block (PCB).
- For the control of postoperative pain, paracervical block do not appear to increase control over pain as compared to sedation/analgesia or no anesthesia/no analgesia.
- PCB with lidocaine was seen to more effective than PCB with saline solution.

Evidence included in this review

Seven randomized controlled trials, with a total of 800 women, were included in this review. The results were categorized by postoperative pain, women’s satisfaction, postoperative nausea and vomiting, and requirement of blood transfusion. Within each category, comparison groups were either comparisons including PCB, comparisons between sedation and general anesthesia, or comparisons of modalities of general anesthesia.

Quality assessment

The GRADE approach was not used. Risk of bias in the included studies was assessed by six areas: random sequence generation, allocation concealment, blinding, incomplete outcome data, selective reporting, and other sources of bias. Four studies were assessed as having adequate randomization and three as unclear risk of bias. Allocation concealment was adequate in three studies, and unclear in the remaining studies. Blinding in three studies was categorized as low risk of bias, whereas the remaining four had an unclear risk. Three studies were categorized as low risk of bias for incomplete outcome data, and the four unclear. In terms of selective reporting, bias was unclear in all studies. Two trials were assessed as having high risk of bias due to other reasons.

Clinical implications

The review findings appear to present conflicting results in terms of the use of paracervical block. There were no differences found with the use of a PCB in the majority of trials. Until further evidence is available, choice of anesthesia should take into account certain considerations such as availability, effectiveness, safety, side effects and practitioner choice and costs.
Further research

Further studies are required to develop valid and reliable assessment of pain and to determine appropriate methods to assess acute and long-term pain. Additional further research into the use of different types of anesthesia for evacuation of incomplete pregnancies, and studies that have patient oriented outcomes is required.

Cochrane review


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Home > Anesthesia for evacuation of incomplete miscarriage