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[Intervention Review]

Immediate post-partum insertion of intrauterine devices

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ABSTRACT

Background

Insertion of an intrauterine device (IUD) immediately after delivery is appealing for several reasons. The woman is known not to be pregnant, her motivation for contraception may be high, and the setting may be convenient for both the woman and her provider. However, the risk of spontaneous expulsion may be unacceptably high.

Objectives

To assess the efficacy and feasibility of IUD insertion immediately after expulsion of the placenta. Our a priori hypothesis was that this practice is safe but associated with higher expulsion rates than interval IUD insertion.

Search methods

We searched MEDLINE, CENTRAL, POPLINE, EMBASE, ClinicalTrials.gov, and ICTRP. We also contacted investigators to identify other trials.

Selection criteria

We sought all randomized controlled trials (RCTs) with at least one treatment arm that involved immediate post-partum (within 10 minutes of placental expulsion) insertion of an IUD. Comparisons could include different IUDs, different insertion techniques, immediate versus delayed post-partum insertion, or immediate versus interval insertion (unrelated to pregnancy). Studies could include either vaginal or cesarean deliveries.

Data collection and analysis

We evaluated the methodological quality of each report and sought to identify duplicate reporting of data from multicenter trials. Two authors abstracted the data. Principal outcome measures were pregnancy, expulsion, and continuation rates. Because the trials did not have uniform interventions, we were unable to aggregate them in a meta-analysis.

Main results

We found nine RCTs; one directly compared immediate post-partum insertion with delayed insertion. Expulsion by six months was more likely for the immediate group than the delayed insertion group (OR 6.77; 95% CI 1.43 to 32.14). In trials of immediate insertion alone, modifications of existing devices, such as adding absorbable sutures or additional appendages, did not appear beneficial. Most studies showed no important differences between insertions done by hand or by instruments. Lippes Loop and Progestasert devices did not perform as well as did copper devices.



Authors' conclusions

Immediate post-partum insertion of IUDs appeared safe and effective, though direct comparisons with other insertion times were limited. Expulsion rates appear to be higher than with interval insertion. Advantages of immediate post-partum insertion include high motivation, assurance that the woman is not pregnant, and convenience. The popularity of immediate post-partum IUD insertion in countries as diverse as China, Mexico, and Egypt support the feasibility of this approach. Early follow up may be important in identifying spontaneous IUD expulsions.

PLAIN LANGUAGE SUMMARY

Inserting an IUD right after childbirth versus a later time

Inserting an intrauterine device (IUD) right after childbirth can be good for many reasons. The woman is not pregnant and may be thinking about birth control. The time and place are convenient for the woman. However, the IUD might be more likely to come out on its own if put in right after having a baby. This review looked how safe it was to insert an IUD right after childbirth. We also looked at whether the IUD stayed in.

We did computer searches for randomized trials of IUDs inserted right after the placenta (afterbirth) delivered. We also wrote to researchers to find more studies. Trials could compare types of IUDs, ways to insert the device, or times for insertion.

We found nine trials; one compared insertion right after childbirth with a later time. The IUD was more likely to come out when inserted right away. The other eight studies looked at types of IUDs put in right after childbirth. We compared those results with studies of IUDs inserted at other times. Inserting an IUD in this setting appeared safe. The IUDs came out more often when put in just after childbirth. Changing the IUD design did not help. Most studies showed no major difference when the IUD was inserted by hand or with a holding instrument.

Putting in an IUD right after childbirth is common in China, Mexico, and Egypt. The timing seems to work well in some countries. Early follow up may help in noting IUDs that come out.