Immediate Postpartum Insertion of an IUD is Safe and Effective

- Inserting an intrauterine device (IUD) immediately after childbirth has advantages—most notably, convenience for the woman and prompt protection from unintended pregnancy.
- The evidence suggests that the immediate postpartum insertion of an IUD (within 10 minutes of delivery) is generally safe and effective.
- IUDs are expelled more often when inserted immediately after delivery compared to insertion at a later time, but early follow-up can help identify spontaneous expulsions.
- Providers need to be properly trained and supervised in any immediate postpartum IUD program.

Background
Increasing numbers of women in the developing world are having their babies in hospitals. Many of these women welcome the opportunity to delay their next pregnancy. The postpartum insertion of an IUD offers several advantages in such instances. For example, the delivery provides a convenient opportunity for the woman to receive IUD services. This is particularly important for women who have limited access to medical care. Having just given birth, the woman is clearly not pregnant, and she may be very motivated to consider long-acting methods.

However, some practitioners wonder about the efficacy of inserting an IUD directly after childbirth because there may be a greater risk of a perforation or spontaneous expulsion compared to insertions performed at another time. In 2001, a Cochrane review of the scientific literature addressed the relative safety and efficacy of inserting an IUD immediately after a woman has given birth.1,2

The Evidence
The systematic review, published in the Cochrane Database of Systematic Reviews 2001, Issue 2, attempted to include all randomized controlled trials that involved the insertion of an IUD no more than 10 minutes after the placenta was expelled. The safety and effectiveness of this approach were examined in comparisons that included different kinds of IUDs and different insertion techniques. Unfortunately, no randomized controlled trials compared immediate postpartum insertion with either interval insertion (meaning the procedure is unrelated to pregnancy) or delayed postpartum insertion (more than 10 minutes after placental expulsion). Eight studies were analyzed in the review.

In general, the expulsion rates after immediate postpartum insertions are higher than those reported in the literature for interval insertions. Three studies involving different types of IUDs found first-year expulsion rates from 4 to 11 percent among women who received immediate postpartum insertions. But not all of the expulsion rates were so low. One trial, involving more than 800 women in six countries, found expulsion rates ranging from 35 to 44 percent for three types of IUDs. The pregnancy rates among these women ranged from 6 to 12 percent. However,
the clinical experience of the providers may have contributed to the incidence of expulsions and pregnancies because the results varied considerably among the study sites. In other trials, pregnancy rates ranged from 0 to 2 percent, which compares favorably with the estimated failure rates for IUDs of 0.1 to 0.8 percent.3

Other factors seemed to have little effect on the clinical outcome. The design of the IUD—involving the addition of sutures or extra arms—did not influence the rate of expulsion. And despite a wide range of expulsion rates—from 8 to 39 percent—most studies showed no major differences between insertions done by hand or with instruments. However, copper devices performed better than Lippes Loop and Progestasert devices regardless of the insertion method.

Few reports addressed the relative safety of immediate postpartum insertion. One study in 13 countries reported that the rates of uterine perforation and infection with immediate insertion were similar to the rates for IUDs in general. Another multi-site trial found no instances of perforations or infections. However, because of the small sample sizes, these studies may not accurately reflect the incidence of such rare events.

Most of the studies included in the review were conducted more than two decades ago—many of these IUDs are no longer widely used, and two of the devices were never marketed. Nonetheless, these trials provide the best evidence on the usefulness of inserting IUDs immediately after childbirth.

Programmatic Implications
The popularity of immediate postpartum IUD insertions in countries as diverse as China, Mexico, and Egypt suggests that the approach is feasible. Nevertheless, the absence of randomized controlled trials that compare immediate postpartum insertions with interval insertions makes it difficult to provide confident advice to women. The higher rates of expulsions associated with immediate insertion suggest that providers should check for the possibility of expulsions during follow-up visits. Clinicians should be trained accordingly.

References:
2 The review was first published in 2001. Literature searches in October 2002 and May 2004 found no new trials. The review was updated for Cochrane style issues and data tables in October 2005.

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