Commentary

Post placental insertion of intrauterine contraceptive device

Insertion of an intrauterine contraceptive device (IUD) immediately after delivery has been recommended by the WHO, as one of the safe and effective methods of temporary contraception. In the immediate post delivery period the women are highly motivated and need an effective method for contraception so that the child can be brought up with a relaxed mind without the worry of unintended pregnancy. On the other hand, if they are made to wait for 6 wk for initiating an effective contraception, they may conceive accidentally or may not come for contraception. This approach is more applicable to our country where delivery may be the only time when a healthy woman comes in contact with health care personnel. Compared with sterilization, however, use of an intrauterine device (IUD) is simpler, less expensive, and immediately reversible. Insertion of an IUD after delivery may avoid the discomfort related to interval insertion, and any bleeding from insertion will be disguised by lochia. However, immediate post-partum IUD insertion may have disadvantages as well. The risk of spontaneous expulsion may be unacceptably high.

In a systematic review by Kapp and Curtis¹, the outcomes of post-partum insertion of IUD at different time interval were compared. The evidence demonstrated no increase in risk of complications among women who had an IUD inserted during the post-partum period; however, some increase in expulsion rates occurred with delayed post-partum insertion when compared to immediate insertion. Expulsion rates were more when compared to interval insertion. Post-placental insertions during caesarean section were associated with lower expulsion rates than post-placental vaginal insertions without any increase in other complications.

In another systematic review², nine trials were reviewed. One of these compared insertion right after child birth with a later time. The results were compared with studies of IUDs inserted at other times. The authors' conclusion was: immediate post-partum insertion of IUDs appeared safe and effective, though direct comparisons with other insertion times were limited. Expulsion rates appeared to be higher than with interval insertion. Advantages of immediate postpartum 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 supports the feasibility of this approach². Early follow up may be important in identifying spontaneous IUD expulsions.

According to medical eligibility criteria 2009, 4th edition³, immediate post-placental insertion of Copper (Cu T) is recommended in breast feeding as well as non breast feeding mothers. It is safe and effective. Insertion after delivery of the placenta is associated with lower expulsion rates than delayed post-partum insertion. Additionally, post-placental placement at the time of caesarean section has lower expulsion rates than post-placental vaginal insertions. Insertion complications of perforation and infection are not increased by IUD placement at any time during the post-partum period^{1,4-15}.

In the study by Shukla *et al*¹⁶, the authors inserted Cu T 200B in 1317 women in the immediate postpartum period. The complicated cases were excluded. There was no immediate complication and expulsion rate at the end of follow up was 10.68 per cent. Only 11.3 per cent came for follow up at 6 months and 78 per cent came for follow up at 6 wk. So the rate of expulsion at 6 month period was apparently not true as only 11 per cent women came for check up. Cu T 200B has been used because this study was conducted in 1995-2000. There is a need for randomized controlled trials to compare the safety and efficacy of IUD (Copper T 380A) when inserted at different times.

There was no case of pelvic inflammatory disease (PID) in the present study but the follow up rate was very low¹⁶. Therefore, it cannot be concluded nil infection. There are reports of high incidence of infections in developing countries^{17,18} which may affect the risk of pelvic infection. Use of prophylactic antibiotics may be considered in our setting where the incidence of post-delivery sepsis is high as compared to developed countries.

It has been observed that expulsion rates vary according to clinician's skill in post-placental insertion of IUD¹⁹. Thus additional training for post-partum insertion of IUD should be provided to the clinicians and the special kit for the same should be provided to the health centers where deliveries are conducted²⁰.

There is a need for large randomized studies to compare the risks and complications of post-placental IUD insertion in special risk groups where there is increased risk of infection such as women with heart disease, diabetes, HIV positive women and patients who are on immunosuppressants for autoimmune diseases. There are not much data from our country. We need to have more studies in different settings before we declare the post-placental IUD insertion completely safe.

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