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 Curtis, 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 review by Shukla et al., the authors inserted Cu T 200B in 1317 women in the immediate post-partum 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 low\textsuperscript{16}. Therefore, it cannot be concluded nil infection. There are reports of high incidence of infections in developing countries\textsuperscript{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 IUD\textsuperscript{19}. 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 conducted\textsuperscript{20}.

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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\textbf{References}

1. Kapp N, Curtis KM. Intrauterine device insertion during the postpartum period: a systematic review. \textit{Contraception} 2009; 80 : 327-36.

2. Grimes DA, Lopez LM, Schultz KF, Van Vliet HAAM, Stanwood NL. Immediate post-partum insertion of intrauterine devices. \textit{Cochrane Database Syst Rev} 2010; Issue 5. Art. No.: CD000306.

3. Department of Reproductive Health, WHO. \textit{Medical eligibility criteria for contraceptive use}, 4\textsuperscript{th} ed.; 2009.

4. Bonilla Rosales F, Aguilar Zamudio ME, Cazares Montero Mde L, Hernandez Ortiz ME, Luna Ruiz MA. Factors for expulsion of intrauterine device Tcu380A applied immediately postpartum and after a delayed period. \textit{Rev Med Inst Mex del Seguro Soc} 2005; 43 : 5-10.

5. Brenner PF. A clinical-trial of the delta-T intrauterine-device - immediate postpartum insertion. \textit{Contraception} 1983; 28 : 135-47.

6. Celen S, Moroy P, Sucak A, Aktulay A, Danisman N. Clinical outcomes of early postplacental insertion of intrauterine contraceptive devices. \textit{Contraception} 2004; 69 : 279-82.

7. Chi IC, Wilkens L, Rogers S. Expulsions in immediate postpartum insertions of Lippes Loop D and Copper T IUDs and their counterpart Delta devices - an epidemiological analysis. \textit{Contraception} 1985; 32 : 119-34.

8. El-Shafei MM, Marshali A, Hassan EO, El-Boghdadi, El-Lakkany N. Postpartum and postabortion intrauterine device insertion unmet needs of safe reproductive health: three years experience of a Mansoura University Hospital. \textit{Egypt Society Obstet Gynecol} 2000; 26 : 253-62.

9. Eroglu K, Akkuzu G, Vural G, Dilbaz B, Akin A, Taskin L, \textit{et al.} Comparison of efficacy and complications of IUD insertion in immediate postpartal/ early postpartum period with interval period: 1 year followup. \textit{Contraception} 2006; 74 : 376-81.

10. Lara R, Sanchez RA, Aznar R. Application of intrauterine device through the incision of the cesarean section. \textit{Ginecol Obstet Mex} 1989; 57 : 23-7.

11. Mishell DR, Jr, Roy S. Copper intrauterine contraceptive device event rates following insertion 4 to 8 weeks post partum. \textit{Am J Obstet Gynecol} 1982; 143 : 29-35.

12. Morrison C, Waszak C, Katz K, Diabate F, Mate EM. Clinical outcomes of two early postpartum IUD insertion programs in Africa. \textit{Contraception} 1996; 53 : 17-21.

13. Muller ALL, Ramos JGL, Martins-Costa SH, Dias RSP, Valerio EG. Transvaginal ultrasonographic assessment of the expulsion rate of intrauterine devices inserted in the immediate postpartum period: a pilot study. \textit{Contraception} 2005; 72 : 192-95.

14. Welkovic S, Costa LO, Faundes A, de Alentar Ximenes R, Costa CF. Post-partum bleeding and infection after post-placental IUD insertion. \textit{Contraception} 2001; 63 : 155-8.

15. Zhou SW, Chi IC. Immediate postpartum IUD insertions in a Chinese hospital - a two year follow-up. \textit{Int J Gynaecol Obstet} 1991; 35 : 157-64.

16. Shukla M, Qureshi S, Chandravati. Post-plecental intrauterine device insertion - A five year experience at a tertiary care centre in north India. \textit{Indian J Med Res} 2012; 136 : 432-5.

17. Marai W. Lower genital tract infections among pregnant women: a review. \textit{East Africa Med J} 2001; 78 : 581-5.

18. Kurewa NE, Mapingure MP, Munjoma MW, Chirenje MZ, Rusakaniko S, Stray-Pederson B. The burden and risk factors of sexually transmitted infections and reproductive tract infections among pregnant women in Zimbabwe. \textit{BMC Infect Dis} 2010; 10 : 127.

19. Thiery M, Van Kets H, Van Der Pas H. Immediate postplacental IUD insertion: the expulsion problems. \textit{Contraception} 1985; 31 : 331-49.

20. Muthal-Rathore A. \textit{Immediate postpartum insertion for intrauterine devices: RHL commentary}. The WHO Reproductive Health Library; Geneva: World Health Organization; 2010.