

## ESC Virtual Seminar

### Immediate post partum use of IUS/IUD Carol Sales, Brazil

#### Questions & answers

- **In your opinion what is better: IUD insertion by hand or with Kelly forceps? Do you have any data about pain in both techniques?**

Each of the various insertion techniques has benefits and limitations, and they have been studied primarily with the goal of minimizing expulsion rates. The manual insertion technique, where the provider's hand attempts to deliver the IUD to the uterine fundus, is simple and intuitive. It does not require additional equipment, which makes it appealing in low resource settings. However, because a hand is larger than forceps, the patient may experience more discomfort, particularly if she does not have effective anesthesia". I extracted this information from the paper published by Goldthwaite LM et al. Postpartum intrauterine devices: clinical and programmatic review. Am J Obstet Gynecol. 2018; 219(3):235-241. In summary, manual insertion is easier, however, it can cause more discomfort. This latter information is based on clinical practice, not evidence. It is a good question to be answered by a well designed study with providers with great experience in inserting postplacental IUDs.

- **Regarding the relatively higher expulsion rate of LNG-IUD inserted post-vaginal delivery compared with Cu-IUD, could it be related to the Mirena inserter being used in contrast to the forceps technique?**

Considering that LNG IUS has higher expulsion rates compared with Cu IUD in insertions performed immediately after a vaginal delivery but not after a cesarean delivery, my main hypothesis is that this finding is related to the insertion technique and not the device. These studies are using Mirena inserter for postplacental insertion instead of forceps or hand. I think this is the main reason for this higher rate of expulsion after vaginal delivery associated with postplacental LNG-IUS insertion.

- **Why do you think perforation is less likely with PP insertion?**

Most perforations are thought to occur at insertion either via the uterine sound or the inserter and thus the IUD/intrauterine system (IUS) is inserted directly into the abdominal cavity or passes there through an iatrogenic opening in the uterine wall. In postpartum insertion, uterine sound is not used and the insertion is made by hand and by forceps, which is unlikely to cause perforation.

- **Does it make sense to perform the immediate insertion after partum in a civilized country where about 95% of patients undergo a postpartum visit within 2 months of giving birth? In my opinion not, we have to invest in the insertion in the first visit after the birth (> 30 days) more than immediately after partum.**

We should avoid the term "civilized countries" to refer to high income countries. Some of these countries (e.g., USA) also report a higher rate of women who do not attend postpartum visit. Moreover, these countries can have vulnerable groups that are more

prone to miss postpartum follow-up visits. Thus, offering postpartum IUD insertion can meet unmet contraception needs of some women. In addition, women can have other reasons (e.g, convenience of postpartum IUD insertion, inserting an IUD while in anesthesia for delivery, etc ). In my point of view, women should have the right to choose the best moment for IUD insertion, considering the pros and cons of each timing of insertion.

- **Do you have in Brasil the possibility to offer DIU-LNG for PPIC at Public Health?**

No, in public health we only have access to copper IUD for postpartum IUD insertion. In the private practice, we have access to all types of IUD/IUS.

- **Michelle just presented the expulsion rate in their study about 28%, which is relatively high. But you recommended the PP insertion because it is economically effective the total number of women who continue with IUD 6 months and 12 months PP is higher compared with the group who insert the IUD 4 weeks PP?**

According to a recent meta-analysis about postpartum IUD insertion and expulsion rates, among women with IUDs placed immediately after vaginal deliveries, the pooled complete expulsion rates varied between women using LNG IUDs (27.4%; range, 18.8-45.2%, n=299) among 8 studies, and 13 studies including women using copper IUDs (12.4%; range, 4.8-37.5%, n=1586). However, among women with IUDs placed at the time of cesarean delivery, the expulsion rates were generally lower than after vaginal deliveries and were similar between women using LNG IUDs and copper IUDs (2.3%; range, 0.0-21.1%, n=261, 7 studies; and 3.8%; range, 0.0-15.0%, n=1320, 17 studies), respectively.) [Averbach SH et al. Expulsion of intrauterine devices after postpartum placement by timing of placement, delivery type, and intrauterine device type: a systematic review and meta-analysis. *Am J Obstet Gynecol.* 2020; 223(2):177-188]. An expulsion rate should be analyzed in terms of delivery type, provider, experience, IUD type, and the criteria used to define IUD expulsion. IUD expulsions are not always clearly defined in the studies, diagnostic criteria were rarely reported, and expulsions may have been ascertained by varied methods, including clinic visit, patient report, or chart review. Although complete expulsions may be less prone to misclassification, partial expulsions may or may not include malpositioned IUDs, whose clinical significance remains unknown. In determining if postpartum IUD insertion is a cost-effective approach, various factors must be considered, including availability of replacement IUDs after expulsion and the patient population return rate for the postpartum visit. In settings with high rates of missed postpartum visits (i.e., 10-40%), postpartum insertion of IUD will be a cost-effective practice. In settings with low rates of missed postpartum visits, it will not be cost-effective.

- **What is the main justification for the 48 hour cut-off in the MECs for postpartum IUD insertion?**

There is limited evidence about IUD insertion between 48 hours and 4 weeks after childbirth (especially related to IUD expulsion rate); therefore after 48 hours it is recommended that insertion is delayed until at least 4 weeks by the WHO.