Immediate postplacental intra-uterine device insertion

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Should we talk about contraception now???
Post-partum contraception : why ?

• Unplanned pregnancy
  – 2% of French women who had an abortion in 2007 had a live birth less than 6 months before the date of their abortion
  – 4% had a child between 6 and 12 months

  *Vilain 2009 IVG en France en 2007*

• Prematurity
  – Higher prevalence of prematurity when 2 pregnancy are close (< 6 months between birth and conception)

  *Conde 2006 JAMA*

• What kind of contraception?
  – Easy to take and to think
  – No contra-indication with thrombo-embolism risks
  – Indicated if breastfeeding is choiced
Factors related to return to fertility and unplanned pregnancy in the first year after birth

- Resume of a sexuality is multifactorial (perineal tear, breastfeeding...)
  - 78% at 3 months
  - 90% at 6 months

_MacDonald, BJOG, 2013. Barrett, BJOG, 2000._

_Source: USAID/ACCESS. 2009. Family Planning Needs during the Extended Postpartum Period in Asia_
A contraception council extends the interval between 2 pregnancies

Fig. 3. Cumulative probability of pregnancy within 18 months after delivery by contraceptive method.


Impact of the 2013 French Pill Scare on Women’s Behaviour Regarding Contraception

- Fear of drug and hormone
- Desir of natural, possibly copper...

- National Perinatal French Survey in 2016 versus 2010

<table>
<thead>
<tr>
<th>Contraception before pregnancy</th>
<th>2010</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pill</td>
<td>74</td>
<td>63</td>
</tr>
<tr>
<td>IUD</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>None</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Other (condom, implant, natural)</td>
<td>12</td>
<td>19</td>
</tr>
</tbody>
</table>
Immediate post-partum device: historic!

• 1950-1960
  – Interest in family planning and regulation
  – Particularly during pregnancy
  – Health care not available everywhere
    • Delivery = hospital = possible contraception
    • Inconvenient to come back to the hospital to put an intra-uterine device after 6 weeks

  *Phatak, India, 1966 AJOG*

• Important rate of expulsion 1980
  – Addition of biodegradable extensions to fix the IUD
  – Diminution of the expulsion: 4 to 6.5% at 6 months

• Nowadays: a lot of articles on IUD immediate placement
  – Approximately 60 articles on the subject (cohort, randomized study)
  – France, China, USA, Mexico, Australia …
In France

• Since 1980, few French articles on IUD immediat insertion
  – Laufe
  – Thiery

• Marketing authorization on the intra-uterine copper device for immediat post-partum insertion

• But in France : « scary sterilet »
  – Not for the adolescent or nullipares
  – Rarely for emergency contraception
  – And not known after the delivery
  – Women and caregivers

Moreau, Bajos and FECOND group. IUD use in France: women’s and physician’s perspectives. Contraception 2014
Objectives of our reflexion

• Information about IUD immediate post-placental
  – Women and practitioner
  – Advantages / Disadvantages
  – Methods of insertion

• Understand why French practionner are reluctant to this method of contraception

• Experience in our maternity IUD immediat post-placental insertion
CNGOF recommandation 2015

• The insertion of a copper IUD within 48 hours of delivery is possible but not common practice in France

• Increased risk of expulsion of an IUD inserted immediately postpartum (10 minutes) compared to delayed insertion (6 and 8 weeks)

• Breastfeeding is one of the main risk factors for uterine perforation

• If you wish to use intrauterine contraception, it is recommended that you arrange for IUD insertion for the post-natal consultation

• Immediate insertion could be considered for patients seeking this type of contraception
Advantages of IUD in immediate post-partum

• Fertility ?
  – Return of ovulation possible at day 21, out of MAMA rules
  – Post-partum is a moment were contraception can be omitted (tiredness...) and where LARC is interesting

• Insertion of IUD in immediate postpartum
  – Painless
  – Contraception immediately after delivery
  – No post-partum/contraception appointment necessary

• Important adhesion to the contraception: 70-90 % of continuation of contraception at 1 year
  
  *Lopez Cochrane 2015, Immediate postpartum IUD for contraception (Review)*

• Marketing authorization (AMM) for Copper IUD in France
• Regularly proposed in China, India, Mexico, Egypte, USA
Main disadvantages

- Expulsion
- Perforation
- Others: Infection and bleeding
- Refusal of practitioners
Expulsion

• General population : 0.6-6 %

• Immediat post-partum
  – At 6 month
    • 7-25 % if placement < 10 min post placental delivery
    • 29-37 % if placement between 24 and 72 h
    • 2-6 % if placement 6 to 8 weeks after
  – No difference between types of placement (hand or forceps)
  – No difference between the type of IUD
  – No difference on the experience of the operator
  – Expulsion rate lower for cesarean section (4%)

• But some studies were stopped sometimes because the rate of expulsion was too high

Grimes, Lopez Cochrane 2015, Immediate postpartum of IUD (Review)
Perforation

• In general population: 0.3-2.2‰ of expulsion after an intra-uterine device placement

• Risks of perforation is majored if
  – Immediate post-partum
  – Breastfeeding
  – Low experience of practitioner

• In the different studies after post-placental placement: no perforation
  – Secondary outcome and power not sufficient because very rare event
Others complications

- Changes in menstrual bleeding pattern
- Cramps
- No increase in risk of Infection, bleeding, perforation, endometritis
- IUD string problems
Breastfeeding and IUD

• Copper IUD
  – Breastfeeding not affected
  – With Cu T380A, breastfeeding women have less pain at insertion and lower removal rates than non-breastfeeding women
    *Farr et al Am J Obstet Gynecol 1996*

• Levonorgestrel IUD
  – No difference for initiation, lactogenesis, continuation at 8 weeks
    *Shaamash Contraception 2005*
  – Same rate of expulsion in breastfeeding and non-breastfeeding women
    *Turok Am J Obstet Gynecol 2017*
How?

- Insertion of IUD within **10 min** of the delivery of the placenta
- If possible with local-regional anesthesia
- Vaginal delivery or cesarean section
- Copper or levonorgestrel
Vaginal delivery

- Instrumental Insertion: using placental forceps

- Manual insertion: IUD held in hand

- Absorbable sutures or additional appendages – not beneficial

- No anti-bioprophylaxis

- Cut strings 1–2 weeks after insertion
Cesarean

• Done manually / instrumental

• Insertion before uterine closure

• No need to pass the string through the cervix (risk of infection, displace IUD)

• No need to fix with ligature
Follow-up

• Clinical exam and ultrasound before discharge

• Return appointment at 4-6 weeks
  – Symptoms
  – Clinical exam for the string
  – Ultrasound if string not seen
Survey of caregivers

WHAT ARE THE BARRIERS TO IUD INSERTION IN THE IMMEDIATE POSTPARTUM PERIOD?
Survey of French caregivers on the IUD in immediate post-delivery

• GoogleForm questionnaire sent to midwives and doctors in Ile de France

• Sample response: 130 questionnaires on all practitioners contacted
  – Not representative
  – Interesting results
  – It is often said that the people who respond are those who know or are interested

• Questions about contraceptive practice
• Questions about postpartum IUD knowledge
Population responding to the survey

- 130 answers
- 89% midwives
- 81% working in the hospital sector
- 59% in maternity hospitals with more than 3000 deliveries, 38% between 1000 and 3000
- 70% in Paris

- 67% without any contraceptive use
Results: les français sont motivés!!

• Half of practicionner talk of contraception during the pregnancy

• 40% are not aware of the possibility of immediate post-placental IUD placement

• 83% are willing to inform women on this method after information and explanation on the technic

• 76% are willing to try this method after information and explanation on the technic
Hopital Royal Bicêtre in 17th century

RETROSPECTIVE STUDY
Why did we choose to place IUD post-placental in our maternity?

- Many women low interval between pregnancies
  - Contraception not adapted to lifestyle and sexuality
  - Few visits honoured in the postpartum period
- Population with high-risk diseases during pregnancy
  - Pulmonary
  - Vascular pathology: preeclampsia, IUGR
  - Obesity, gestational diabetes on insulin

- Hospital practitioner involved in both family regulation and birth
  - Systematic offer of postpartum contraception to women during pregnancy
  - Conversion of the team to this practice
Methods

- 2017-2018 Retrospective Survey
- Cases with IUD insertion immediately after delivery
- Caesarean section or vaginal delivery

Protocols
- Placement within 10 minutes after delivery
- Ultrasound inspection and IUD clinic before leaving the maternity ward
- Clinical and ultrasound control at 1 month and 3 months
Results: population

- 38 women with post-placental IUD insertion between March 2017 and August 2018

- Route delivery
  - 35% programmed caesarean sections
  - 12% of caesarean sections in emergency
  - 65% vaginal delivery
  - 3 abortions for medical reason

- IUD type
  - 29% IUD levonorgestrel
  - 41% copper
  - 26% not reported

- All patients had anesthesia
Result: follow-up

• No adverse events reported: no bleeding after IUD insertion, no high genital infection

• Breastfeeding after leaving the maternity ward
  – 20% artificial breastfeeding
  – 62% exclusive breastfeeding
    • 1/3 with a levonorgestrel IUD
  – 18% mixed breastfeeding

• 94% of women had an exit ultrasound
  – 9% of expulsion on Day 4
Results: follow up

• Ultrasound at 1 month after delivery
  – 21% lost women
  – 71% of IUDs in place, lost to follow-up counted as expulsion
  – 88% of IUDs in place if lost to follow-up excluded

• Satisfaction with postpartum consultation
  – 35% of data not filled in: lost sight or no report
  – 1 patient requested removal
  – 40% of the others are satisfied

• M3 consultation: 27% came to the consultation
Main Results
Immediate post-placental IUD insertion

• Appears safe and effective
• Within 10 minutes after placental separation
• Expulsion around 7-25 % at 6 months
• No other complication (same as normal IUD insertion)

• In France: caregivers (midwives mostly) seems to be interested but are not aware of this method

• Small experience in a maternity: good start but needs more practice and formation of caregivers
What about women?

• Satisfaction: perhaps not a good indicator
  – They are satisfied
  – But they always are in abortion and contraception studies

• Is immediate post-delivery contraception a real assistance for women?
  – Contraception council during pregnancy of immediate post-partum
  – Place and good moment for a contraception choice?

• Stigma of contraception in immediate post partum for a type of population more vulnerable (multiparas, migrants, more precarious women...
Perspectives

• Study on choice of contraception
  – During pregnancy
  – In perspective of pregnancy and delivery

• Communication on post-placental IUD insertion for french caregivers

• Prospective study on post-placental IUD
Conclusion

• "No woman can call herself free who does not own and control her own body.”

1920  Margaret Sanger

• Proposition of a contraception method during pregnancy, before delivery or before abortion
  – Even if women are choosing the method
  – Is it the good time ?
  – As caregiver do we force the family regulation?
Un cas intéressant

- Pose d’un DIU au levonorgestrel en post-partum immédiat
- Échographie à J3: pas de DIU
- ASP

- Quel conduite à tenir?
• Patiente de 38 ans, G3P3.
• Accouchement voie basse le 31/05/18, suite à une maturation pour tensions labiles dans un contexte d'HTA chronique.
• Allaitement maternel en cours.
• Pose dispositif intra-utérin levonorgestrel dans les suites immédiates.
• Au contrôle échographique avant la sortie de suites de couche, le DIU n'est pas retrouvé. À l'ASP, on visualise le DIU en intra-abdominal.
• Asymptomatique.
• Souhait d'une ligature tubaire en février 2018.
• Indication à une coelioscopie exploratrice pour retrait de DIU intra-abdominal et ligature tubaire.