





# Immediate postplacental intra-uterine device insertion

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> FIAPAC Nantes 15 Septembre 2018

# 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)</li>

Conde 2006 JAMA

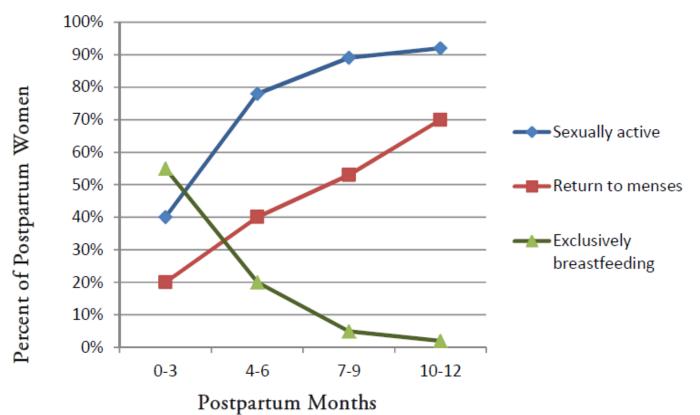
- What kind of contraception?
  - Easy to take and to think
  - No contra-indication with thrombo-embolism risks
  - Indicated if breasfeeding is choiced



# 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

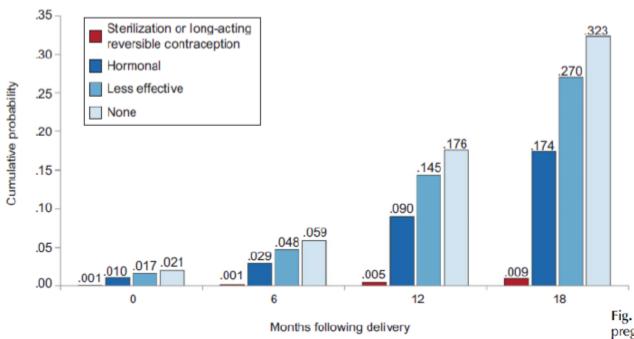


Fig. 3. Cumulative probability of pregnancy within 18 months after delivery by contraceptive method. White. Contraception and Short Pregnancy Intervals. Obstet Gynecol 2015.

Thiel de Bocanegra, Obstet and Gynecol, 2013. White, Obstet and Gynecol, 2015.

# 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

	2010	2016
Contraception before pregnancy	%	%
Pill	74	63
IUD	6	10
None	8	8
Other (condom, implant, natural)	12	19

# 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 immediat 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 practicioner
  - Advantages / Disadvantages
  - Methods of insertion

- Understand why French practionner are reluctant to this method of contraception
- Experience in our maternity IUD immediat postplacental 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 immediat 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**

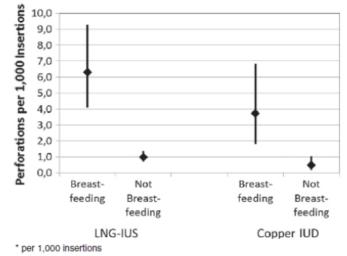
- General population: 0.6-6 %
- Immediat post-partum
  - At 6 month
    - 7-25 % if placement < 10 min post placental delivery</li>
    - 29-37 % if placement between 24 and 72 h
    - 2-6 % if placement 6 to 8 weeks after
  - No difference between types of placement (hand or forceps)
  - No difference 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 a intrauterine device placement

- Risks of perforation is majored if
  - Immediate post-partum
  - Breastfeeding
  - Low experience of pratician



- 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

- Breasfeeding not affected
- With Cu T380A, breast feeding women have less pain at insertion and lower removal rates than non breast feeding 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 explusion in beastfeeding and non breastfeeding women

Turok Am J Obstet Gynecol 2017

#### How?

 Insertion of IUD within 10 min of the delivery of the placenta

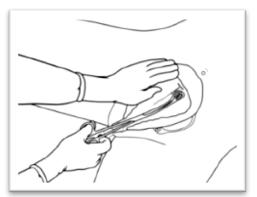
If possible with local-regional anesthesia

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 antibioprophylaxy
- 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 lle 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

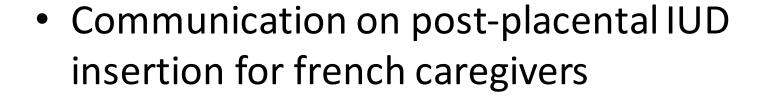
- Appears safe and effective
- Within 10 minutes after placental separation
- Expulsion around 7-25 % at 6 months
- No other complication (same as normal IUD insertion)
- In France: caregivers (midwives mostly) seems to be interested but are not aware of this method
- Small experience in a maternity: good start but needs more practice and formation of cargivers

#### 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 immediat postpartum
  - 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



Prospective study on post-placental IUD



#171779

#### **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 postpartum immediat
- Echographie 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 levonorgestreldans les suites immédiates.
- Au contrôle échographique avant la sortie de suites de couche, le DIU n'est pas retrouvé. A 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 intraabdominal et ligature tubaire.