Quick start & extended use of hormonal contraception

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Why was 21/7 invented ???

- Mimics natural cycle => acceptable for women
  « menses » means:
  - Not pregnant
  - Predictable bleeding is practical
  - Everything looks normal
- BUT:
  - With 20µg EE: 30% of women have a dominant follicle at the end of Pill Free Period (PFP) =>
    > pregnancy (and > spotting) if compliance is not good
  - With 50µg EE or 24/4 regimen of 20µg EE: no dominant follicle in PFP

Pill-free Interval (PFI) & COC

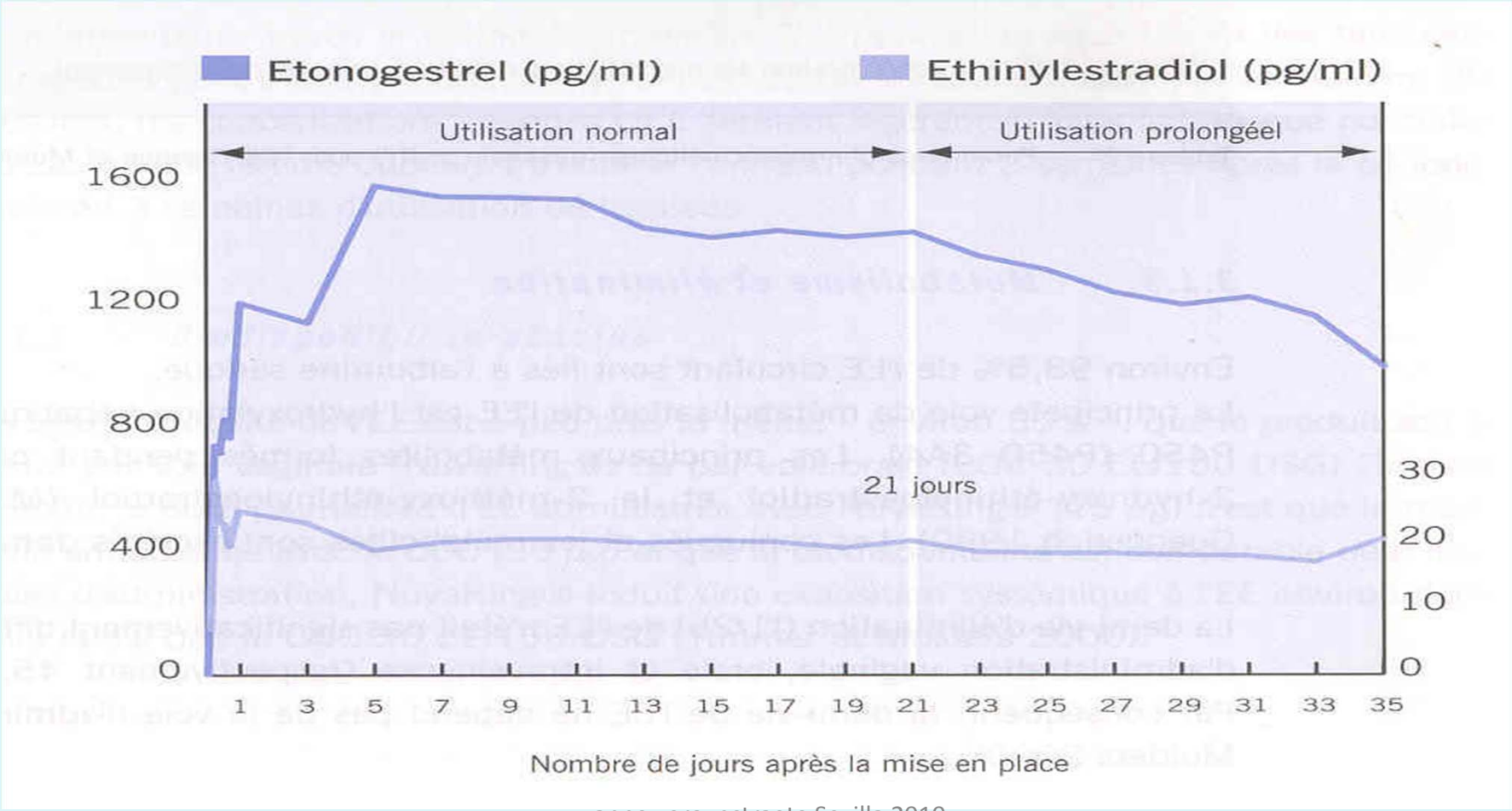
- Do women need a monthly pill-free interval? **NO** :
  3 or 4 packets can be taken in a row, or continuous use,
  or **continuous use until bleeding episode** (=> stop 4d:PFI)
- in the following cases PFI can be omitted
  - at the woman's choice
  - Headaches, migraine during PFI
  - Painful or heavy withdrawal bleeds
  - Absent withdrawal bleeds
  - Endometriosis; Von Willebrand
  - Premenstrual syndrome
  - Suspicion of decreased efficacy for any other reason

Continuous use of COC

- **Pro:**
- Less bleeding in total
- Less « pill-free interval » related side effects (headache, genital irritation, tiredness, bloating, menstrual pain (cochrane 2005))
- Better contraceptive reliability
- **Contra**: if pregnancy: may be discovered late!
- Continuous use : More **unscheduled** bleeding
  - => More dropouts
  - => **10µg EE** in place of placebo during the 7d (day 85-91) improves the bleeding profile: less scheduled and unscheduled bleeding (Kaunitz Contraception 2009)
  - After 10 to 12 months: 80 to 100% are in amenorrhea

Nuvaring: serum concentrations over time

Timmer and Mulders 2000



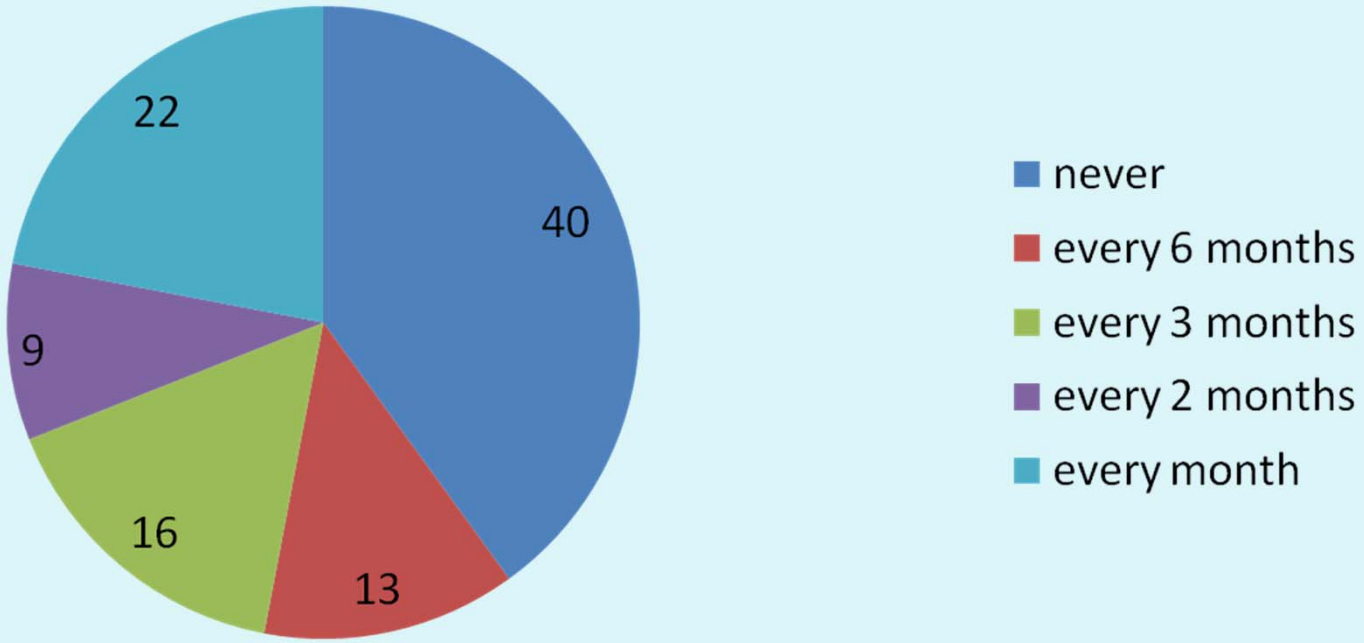
Extended use: combined vaginal ring

Sulak Obstet Gynecol 2008

- Best results concerning **spotting**:
- Replace the ring **monthly on the same calendar day** (no ring-free days)
- If breakthrough bleeding/spotting for 5d => remove the ring for **4 days** ; store it and reinsert that same ring

What do women want?
They dont all want the same!

ARHP Greenberg Quinlan Rosner Survey 2005



Attitudes of women about contraception without menses

- Not all women want to suppress menses!
- In some cultures, in some women:
  - No menstruation is felt like infertility, menopause, old
  - they miss the “monthly purification”
  - The bad blood will accumulate in your body and will make you ill

Wait for menses before starting contraception?

- A lot of patients get pregnant while waiting!

Wait for menses before fixing IUD ?

- **Insertion of Copper IUD**
- Any time within the **first 12 days** after the start of menses
- Any other time if she is not pregnant (using reliable contraception, or no sex)
- Emergency IUD => see next slide
- No additional contraception is needed
- **Insertion of Levonorgestrel IUD**
- Any time within the **first 7 days** after the start of menses .
  No additional contraception is needed (WHO)
- Any other time if she is not pregnant (using reliable contraception, or no sex); backup method for the first 7d after insertion.
- **Fear that the insertion could be difficult?** 2 misoprostol pills evening before insertion (or 3-4 h before insertion) and Ibuprofen
- **Immediately after surgical abortion** of first trimester (40% will not come back to fix the IUD at follow-up visit)

Copper – IUD as emergency contraception

- **Most effective:** **prevents > 99% of pregnancies**
  - Within 5 d of unprotected intercourse
  - Within the first 12 days after the start of menses
  - Or maximum up to 5 days after estimated ovulation (= day 19 if regular cycle of 28 d)
- Emergency-IUD should be an **option in real life!**
- Special training
- EC clients are often young, nulliparous: insertion may be painful, difficult
- Risk of STI (new sexual partner, rape) => prophylactic antibiotics? (1g azythromycin or doxycyclin)

Quick start of oral contraception

- **After emergency contraceptive pills**
  - Levonorgestrel => back up for 7d
  - Ulipristal => back up for 14 d

Quick start of oral contraception

Westhoff Obstet Gynecol 2007

- 1716 young women < 25y randomly assigned to: conventional start versus Quick Start
- Directly observed , immediate initiation of the pill improves short-term continuation => second pill-strip (but not at 3 and 6 months follow-up!)
- Quick starters were **slightly less likely to become pregnant within 6 months** (HR 0.9, 95% conf intervall 0.64-1.25)
- **81% rated the Quick Start approach as acceptable or preferable to waiting**

Quick Start: vaginal ring versus pill

(Schafer Contraception 2006 randomized trial)

- 201 women willing to be randomized => 87% follow up
- Start ring or pill immediately with back up 7d
- No pregnancies
- Very satisfied with method (p=.003)
  - 61% of ring users
  - 34% of pill users
- Posttrial contraception (p<.001):
  - Ring users continue ring: 79%
  - Pill users continue pill: 59%
- **Ccl : women starting immediately with the ring were highly satisfied and wanted to continue its use**

Progestogen-only injectables

DMPA 150 mg Petta, Fertil Steril 1998

- DMPA injection on a given cycle day and **ovulation**
  - Day 8 0/5 women
  - Day 9 0/5
  - Day 10 **1/5**
  - Day 11 & 12 **4/10**
  - Day 13 **4/5**
- All ovulations **within 3d after DMPA** injection
  - **DMPA does not work as an EC** to block ovulation!
- Cervical mucus thickens within 7d of injection
- CCL: if injection after day 7 => backup for 7 days

Progestogen-only injectables

DMPA 150 mg Sneed Contraception feb 2005

- **Prospective study with Same Day injection**
- 3 pregnancies/149 w when injection ≥ day 8 of cycle =**2%**
  - They had injection on day 17, 21 and 40 of cycle
  - They had recieved EC because of unprotected sex
  - They had negative pregnancy test at time of injection
  - All 3 became pregnant at the time of the injection
  - One reported unprotected sex in the 7d after injection
- Less than half consistently used condoms during 7d !
- Difficult to achieve follow-up pregnancy tests!!!
  - Many reminder phone calls were needed!
  - => **self pregnancy testing!**

Progestogen-only injectables
DMPA 150 mg: Same Day

- **Immediate DMPA after 1st trim abortion => less repeat pregnancies and abortions in next 12 months** (Madden 2009)
- In a young population, Same Day Start DMPA was associated with **improved adherence** to DMPA and fewer pregnancies than the « Bridge group » (Rickert 2007) (first another hormonal method and DMPA after 21 d: only 55% had DMPA in the end! almost 4 times more pregnancies in Bridge group !!)
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- **Risk = delai in diagnosis of pregnancy** with Same Day inj 50% of pregnancies were diagnosed > first trimester (Planned Parenthood) => Less access to abortion and delai in prenatal care

Same Day injection protocol of DMPA

inspired from: **Nelson Contraception 2007: 1056 women** (historical cohort study)

- Normal protocol: within 5d of start menses (WHO: 7d)
- **If more than 5d since start menses**:
- Emergency contraception needed ?
- Would the woman opt for termination if pregnant?
- Routine sensitive urine **pregnancy test before injection**
- Backup for **7 d**
- **Pregnancy test after 3** weeks if any unprotected sex earlier in the cycle
  - 81% of initial injections were Same Day (> 5d)
  - At each reinjection: 14-27% women came late
  - Risk of pregnancy: 0.66% per Same Day use (but only 27% of women who were given EC returned for a repeat pregnancy test)

Cochrane database 2008
Immediate start of hormonal contraceptives

- **Bleeding patterns and side effects were similar** in trials that compared immediate with conventionnal start
- Immediate start of DMPA showed fewer pregnancies and higher satisfaction than a *bridge method* before DMPA
- Immediate start of vaginal ring => less bleeding problems than immediate start of COC
- **Ccl: « we found limited evidence that immediate start of hormonal contraception reduces unintended pregnancies or increases method continuation »**
- Pregnancy rate was lower with immediate start of DMPA versus another method

Quick –Start pill initiation

Guttmacher: National survey (USA) in 2005 (Landry Contraception 2008)

- Planned Parenthood clinics: 78%
- Public health departments: 47%
- « other public clinics »: 27%

- Obstetrician-gynaecologists: 38%
- Family physicians: 13%

Quick start & extended use of hormonal contraception

- **Should be offered to all women who want it!**