It’s Not Grandma’s Birth Control

New Products, New Guidelines

Patricia Geraghty MSN, FNP-BC, WHNP
Off label use will be included and identified in this presentation.

**Objectives**

- Describe the method of action of contraceptive options on fertility and the menstrual cycle.
- Apply safety and efficacy considerations to the provision of contraception.
- Minimize patient side effects and maximize patient satisfaction utilizing the broad spectrum of available contraceptives.

**Disclosures**

- **Speaker**
  - Bayer Health Pharmaceuticals
- **Advisory Boards**
  - Sharecare Inc.
  - Bayer Health Pharmaceuticals
  - Actavis
Unintended Pregnancies in the USA

Unintended Pregnancy 49%
Intended Pregnancy 51%

All Pregnancies

Unintended Pregnancies
Month of Conception

Using Birth Control 48%
Not Using Birth Control 52%
Reasons for Non-Use of Contraception

• Did not expect to have sex 14.1%
• Worried about side effects of birth control 16.2%
• Male partner refused 16.9%
• Didn’t really mind if pregnancy occurred 22.8%
• Did not think she could get pregnant 43.9%

Physiology of Fertility Control

• Keep the sperm away
  • Barrier methods – *diaphragm, condoms, withdrawal, sponge, spermicide*
  • Fertility awareness
  • Progestin only methods – *implant, progestin IUD, progestin only pill*

• Keep the egg away
  • Combined Hormonal Contraception – *pills, patch, ring*
  • Progestin only
• Steady state progestin & estrogen:
  • Prevents increase in FSH and LH
  • Prevents development of dominant follicle
  • Prevents ovulation

• Steady state progestin
  • Thickens cervical mucus
  • Inhibits sperm transport
  • May hamper endometrial implantation
Talk About Safety and Practice Guides


Talk About Tiers

• Effectiveness of Family Planning Methods


Effectiveness of Family Planning Methods

<table>
<thead>
<tr>
<th>Method</th>
<th>Rate per 100 Women in a Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implant</td>
<td>0.05%</td>
</tr>
<tr>
<td>Copper IUD</td>
<td>0.2%</td>
</tr>
<tr>
<td>Male Sterilization</td>
<td>0.15%</td>
</tr>
<tr>
<td>Female Sterilization</td>
<td>0.5%</td>
</tr>
<tr>
<td>Injectable</td>
<td>6%</td>
</tr>
<tr>
<td>Pill</td>
<td>9%</td>
</tr>
<tr>
<td>Patch</td>
<td>9%</td>
</tr>
<tr>
<td>Ring</td>
<td>9%</td>
</tr>
<tr>
<td>Diaphragm</td>
<td>12%</td>
</tr>
<tr>
<td>Male Condom</td>
<td>18%</td>
</tr>
<tr>
<td>Female Condom</td>
<td>21%</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>22%</td>
</tr>
<tr>
<td>Sponge</td>
<td>24%</td>
</tr>
</tbody>
</table>

Fertility-Awareness Based Methods

<table>
<thead>
<tr>
<th>Method</th>
<th>Rate per 100 Women in a Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condoms, sponge</td>
<td>24%</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>26%</td>
</tr>
</tbody>
</table>

* The percentages indicate the number out of every 100 women who experienced an unintended pregnancy within the first year of typical use of each contraceptive method.

CONDONS SHOULD ALWAYS BE USED TO REDUCE THE RISK OF SEXUALLY TRANSMITTED INFECTIONS.

Other Methods of Contraception


Sterilization: Multiple techniques

- Laparoscopic Tubal Ligation or Salpingectomy
  - ACOG Guideline supports discussion of ovarian cancer protection with removal of tubes\(^1\)
  - Population studies show 35% risk reduction\(^2\)
- Hysteroscopic Occlusion
  - 3 month back up contraception
  - Confirmatory HSG test
- Vas Deferens Ligation
  - 3 month back up contraception
  - Confirmatory semen analysis

Sterilization

- **Advantages**
  - Highly Reliable
  - Final contraceptive decision

- **Disadvantages**
  - Risk of regret
    - Women < 30y 20.3%
    - Women ≥ 30y 5.9%
  - No benefit for age related menstrual changes

AAP Guidelines: First Line Birth Control for Teens

Contraception Choice Project

- 1,404 teens in the project, 72% chose IUD or implant
- Teen pregnancy rate was 34.0 per 1,000 teens compared to the national average of 158.5 per 1,000 teens
- Abortion rate for teens in the CHOICE project was 9.7 per 1,000 teens compared to the national average of 41.5 per 1,000 teens

Tier 1 Reversible Methods

- Implant, IUDs

Implant: Nexplanon®

- Single rod with 0.4 mg etononoestrel/day
- 3 years contraceptive efficacy
- Place anytime assured not pregnant
  - Manufacturer sponsored insertion and removal training for providers
  - Clinical trials of 2300 women, mean insertion time 1.4 minutes, mean removal time 2.6 minutes
Advantages/Challenges

- Progesterone only method
- Rapidly reversible; immediate return to fertility
- No change in serum estrogen levels
  - Plausible no impact on bone mineral density
- Effectiveness lowered by neuroleptics (except valproic acid) and rifampin.
- Ovarian cyst formation
- Insufficient data to assure effectiveness in women > 90 kg (195 lbs)

Implant Tolerability

• Unpredictable, infrequent bleeding most common profile

• Causes of discontinuance
  • 13% bleeding pattern changes
  • 23% other AE’s such as emotional lability (6%), weight increase (3.3%), depression (2.4%), acne (1.5%)

• Interim management of bleeding irregularity
  • NSAIDs for 5 – 7 days
  • COC or Estrogen for 10 - 20 days if medically eligible

# Intrauterine Devices (IUD)

<table>
<thead>
<tr>
<th>Copper * (Paragard®)</th>
<th>LNG IUS 52 (Mirena®)</th>
<th>LNG IUS 13.5 (Skyla®)</th>
</tr>
</thead>
<tbody>
<tr>
<td>32 x 36 mm</td>
<td>32 mm square</td>
<td>28 x 30 mm with silver ring*</td>
</tr>
<tr>
<td>Copper wrapped</td>
<td>52 mcg LNG w/avg 20 mcg/d release rate</td>
<td>13.5 mcg LNG w/avg 6mcg/d release rate</td>
</tr>
<tr>
<td>No hormones</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Replace 10 years</th>
<th>Replace 5 years</th>
<th>Replace 3 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavier bleeding (50-80 ml)¹</td>
<td>Reduced bleeding (5 ml)²</td>
<td>Likely regular bleeding</td>
</tr>
</tbody>
</table>

IUD Method of Action

• Alters endometrium, hinders sperm motility
  • Paragard sets up inflammatory response
  • LNG thins lining, and also thicken cervical mucus

• Evidence indicates not abortifacent\(^1\)
  • No recovery of fertilized eggs in flushed tubes
  • No changes serum hCG

Bleeding Profiles LNG IUS

• Irregular spotting and bleeding first 6 months

• Lng IUS 52
  • 6 months: 20% amenorrheic, 80% menses 1-2 days\textsuperscript{1}
  • 12 months: 50% women amenorrheic\textsuperscript{2}

• Lng IUS 13.5\textsuperscript{3}
  • 1 month: bleeding 7.3 d (SD 5.6), spotting 9.2d (SD 6.1)
  • 4 months: decreased by 50%
  • 12 months: 6% amenorrheic, 20% two episodes bleeding/90 days

3. Prescribing Information. Bayer Pharmaceuticals Inc. 2013
IUD Advantages/Challenges

- Rapidly reversible
- Serum estrogen remains normal
- Progesterone only method
- Long term satisfaction high
- **Appropriate regardless of parity**

- Adoption and discontinuance may require several steps
  - Confirmation of benefits if 3rd party payer
  - Testing for STD – at risk vs. mucopurulent discharge
  - Assurance not pregnant
  - Professional removal

- Unpredictable bleeding patterns
IUD Adverse Events

- Perforation
  - Incidence 1:1000
  - RR 6.1 in breastfeeding women

- Spontaneous Expulsion < 1% overall, higher rate nullip

- Infection < 1%

- LNG Risk of Ectopic Pregnancy < 1% overall population
  - 50% of pregnancies will be ectopic

Tier 1 Reversible Methods
Long Term Satisfaction High

- Choice Project Data
- 77% continued use at 2 years vs. 41% other methods
  - No difference among types of IUD
  - No difference teens vs. older age

Tier 2:
6-12 pregnancies/100 users/year

Effectiveness of Family Planning Methods
Tier 2 Methods

80-100 mcg EE

Lower doses of estrogen

10-35 mcg EE

1960’s

1970’s

1980’s

1990’s

2000’s

2010’s

Norethindrone

Levonorgestrel

Norgestimate

Drospirenone

Dienogest

Patch

Depo

POP

Ring

Patch

Depo

POP

Ring

1960 Monophasic

1976 Biphasic

1984 Triphasic

FDA approval first COC with Ethinyl Estradiol

2003 Extended Regimen 84/7

2006 Extended Regimen 24/4

2006 Extended Regimen 84/7EE

2007 Extended Regimen Daily Continuous 365/0

New Estrogen estradiol valerate

2010 Quadriphasic
# Progestins

<table>
<thead>
<tr>
<th>Levonorgestrel Family (Gonanes)</th>
<th>Norethindrone Family (Estranes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Levonorgestrel</td>
<td>Norethindrone*</td>
</tr>
<tr>
<td>Desogestrel/Etonogestrel</td>
<td>Norethindrone acetate</td>
</tr>
<tr>
<td>Norgestimate/Norelgestromin</td>
<td>Ethnodiol diacetate</td>
</tr>
<tr>
<td>Gestodene*</td>
<td>Dienogest</td>
</tr>
<tr>
<td>*Not available in USA</td>
<td>Lynestrenol*</td>
</tr>
<tr>
<td>*Not available in USA</td>
<td>Lynestrenol*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Drospirenone</th>
</tr>
</thead>
</table>

| Medroxyprogesterone Acetate (injectible) |
Advantages/Challenges

- Highly effective
- Easy to adopt and discontinue
- Health Benefits in Addition to Contraception
  - Decrease menstrual bleeding
  - Regulate menses with combined hormonal methods
  - Manage premenstrual symptom
  - Prevent uterine and ovarian cancer
- Adherence to dosing timeframes
- Difficulty obtaining continued contraceptive supplies
- Identifying the right user
- Managing side effects and rare adverse events
- Persistent myths
Easy Adoption: Quick Start

• **All tier 2 methods can be initiated at any time if reasonably sure not pregnant**
  • \( \leq 7 \) days from start of last menses
  • Abstinent since start of last menses
  • Correctly using a reliable method of contraception
  • \( \leq 7 \) days from spontaneous or induced abortion
  • \( \leq 4 \) weeks postpartum
  • Fully breastfeeding + amenorrheic + \( \leq 6 \) months postpartum
Quick Start Concerns

• Need for back up? Usually not. The exceptions:
  • Abstinent but > 7 days from onset last menses
  • Use back up method for 7 days
  • Progestin only pills > 5 days from onset last menses
  • Use back up method for 2 days

• Unscheduled bleeding?
  • 19% started day 1-7
  • 26% started day 8-15
  • 55% started > day 15

\[
\text{No difference in days bleeding}^{1}
\]

Health Benefit: Decrease Bleeding
Extended or Continuous Use

- **Planned hormone free interval (HFI) after at least 2 contiguous cycles, typically 84 to 168 days**
- Extended use not recommended with patch
  - Serum estrogen increases with each weekly application\(^1\)
- Evidenced based safety
  - Monophasic and Triphasic formulations studied in 1987\(^2\)
  - Vaginal ring studied in 1992\(^3\)
  - Progestin only pills and injection always continuous use

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Health Benefit: Combined Hormonal Regulate Menses

- Scheduled bleeding = during HFI and continuing up to days 1-4 of next cycle\(^1\)
- Fewer days unscheduled bleeding 21/7 vs. 24/4 over four cycles\(^2\)
- Reduce anovulatory bleeding by 80\%\(^3\)
  - PCOS, menarche, and perimenopause

Health Benefit: Manage PMS

- Premenstrual symptoms
  - Mastalgia    Negative Affect
  - Cramping    Fatigue
  - Bloating    Increased Appetite
- **Symptoms correlated with HFI**
- Shorten the HFI
  - Reduced symptoms DRSP/EE 24/4 over 21/7 and placebo
  - Reduced symptoms extended use

Challenge: Missed Pills, Lost Ring, Detached Patch, Late Injection

- Compliance difficult across all age groups\(^1\)
  - 47% of women miss ≥ 1 pill per cycle
  - 22% miss ≥ 2 pills per cycle

- Timely refill difficult: rate varied among methods from 34% to 16% at 12 months\(^2\)
  - 34% Drosperinone/EE 20 mcg 24/4
  - 16% Norgestimate/EE triphasic


\(\text{Obtained refill before end of HFI}\)}
Consequences of Delays

- Oral contraception ovulation varies widely but still “low” when HFI ≤ 13d
  - Less pregnancies with HFI < 7d
- Ovulation inhibited when single ring used up to 35d
- No data on increased HFI with patches
  - Serum levels EE and norelgestromin within reference range when patch wear extended for 3 days
- Re-injection DMPA may be given up to four weeks late (17 weeks from previous injection)
Supply at Initial and Return Visits

- **Provide 1-year supply**: USSPR
  - 13 pill packs of 28-day cycles
  - 13 vaginal rings
  - 39 patches

- Increases continuation rates
  - Supplying 1 pack then 3 packs vs. 4 packs at once no difference

- Lower cost per patient despite any increased product wastage
  - Fewer pregnancy tests and fewer pregnancies
## Managing Missed Pill, Patch or Ring

<table>
<thead>
<tr>
<th>&lt; 48 Hours</th>
<th>≥ 48 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resume pill, patch, ring asap. Discard any additional missed pills.</td>
<td></td>
</tr>
<tr>
<td>Continue regular dosing, including taking 2 pills same day if appropriate.</td>
<td></td>
</tr>
<tr>
<td>Keep same ring or patch change day.</td>
<td></td>
</tr>
<tr>
<td>No additional contraception needed.</td>
<td>Use back up until 7 consecutive days use completed.</td>
</tr>
<tr>
<td>Emergency contraception not needed but may consider if within one week either side of HFI.</td>
<td>Consider Emergency Contraception if first week of cycle or within 5 days unprotected intercourse.</td>
</tr>
</tbody>
</table>
## Managing Missed Pill, Patch or Ring

<table>
<thead>
<tr>
<th>&lt; 48 Hours</th>
<th>≥ 48 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET GOING</strong></td>
<td></td>
</tr>
<tr>
<td><strong>KEEP GOING</strong></td>
<td></td>
</tr>
<tr>
<td>.</td>
<td>Use back up for 7 days</td>
</tr>
<tr>
<td></td>
<td>Consider Emergency Contraception if first week of cycle or within 5 days unprotected intercourse.</td>
</tr>
</tbody>
</table>
Challenge: Identifying the Right User - Tests

• She is up to date on Pap tests and STD screening.
• Always essential and mandatory for safe/effective use (Class A):
  • Blood Pressure
• Does not contribute to safety and efficacy (Class C):
  • EVERYTHING ELSE!
• Special consideration: Weight/BMI
• Special consideration: Health promotion and preventative care
The Right User: Medical Eligibility

- USMEC evidenced based guidelines for safety of contraceptive use adapted from WHO MEC
  - Category 1 no restriction for the use of the contraceptive method
  - Category 2 advantages outweigh theoretical or proven risks
  - Category 3 risks usually outweigh the advantages
  - Category 4 unacceptable risk
Common or Easy to Miss

3’s and 4’s

- Combined Hormonal Contraception
  - Tobacco Use and Age
  - Migraines with or without aura
  - Hypertension
  - Diabetes with >20 yr duration or TOD
  - **DO NOT MISS – History VTE**

- Injectable
  - Complicated Diabetes
Migraine and Combined Hormonal Methods

- Migraine is a risk factor for ischemic stroke
  - migraine of >12 years duration OR 4.61 (1.27-16.8)
  - initial migraine with aura OR 8.37 (2.33-30.1)
  - attacks > 12 per year OR 10.4 (2.18-49.4)

- Risk effect is additive with combined hormonal contraception
  - Migraine with aura – USMEC 4
  - Migraine without aura- USMEC 2 until age 35 yr, when it becomes 3 to initiate use and a 4 to continue use
## Confirm Migraine Diagnosis

<table>
<thead>
<tr>
<th>Headache Type</th>
<th>Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Migraine without aura:</strong> Migraine without aura: Duration 4-72 hours with/without treatment</td>
<td>At least two of following:</td>
</tr>
<tr>
<td></td>
<td>• unilateral</td>
</tr>
<tr>
<td></td>
<td>• pulsatile quality</td>
</tr>
<tr>
<td></td>
<td>• moderate to severe intensity</td>
</tr>
<tr>
<td></td>
<td>• aggravated by or causing avoidance of routine physical activity</td>
</tr>
<tr>
<td></td>
<td>At least one of the following:</td>
</tr>
<tr>
<td></td>
<td>• photophobia and/or phonophobia</td>
</tr>
<tr>
<td></td>
<td>• nausea and/or vomiting</td>
</tr>
<tr>
<td><strong>Migraine with aura:</strong> Migraine with aura: Meets above criteria and has reversible neurological signs. Symptoms gradually develop over 5 minutes. Duration 5 to 60 minutes.</td>
<td>At least one of the following:</td>
</tr>
<tr>
<td></td>
<td>• positive/negative visual changes</td>
</tr>
<tr>
<td></td>
<td>• positive/negative sensory</td>
</tr>
<tr>
<td></td>
<td>• dysphasic speech</td>
</tr>
</tbody>
</table>

Adapted from International Headache Society. *International Classification of Headache Disorders 2nd ed. 1st Revision*. Blackwell Pub. 2005
Hypertension

- CHC all delivery routes are 3 even if BP controlled
  - > 20 studies demonstrate increased risk stroke, acute MI, peripheral arterial disease with HTN
  - No evidence if protection provided by treatment applies with CHC use
  - Discontinuation might make blood pressure control easier

- ALL progestin only methods with adequately controlled or BP < 160/100 are category 1 or 2
  - DMPA only is 3 if BP ≥ 160/110.
The Right User: Bone Concerns and Depo

- Longitudinal and cross-sectional studies 5-7% loss BMD
  - Greatest loss in groups with additional osteoporosis risks such as tobacco use
- BMD values appear to return to non-user values 2-3 yrs after discontinuance (WHO 2007)
  - Very little data on women older than 20’s
- FDA Black Box 2002 – Limit use to 2 years
- ACOG and Society for Adolescent Medicine do not restrict use for skeletal concerns

http://www.who.int/reproductivehealth/topics/family_planning/pbrief_bonehealth.pdf?ua=1

accessed 20 Jan 2015
Adverse Event: Method Failure

Unintended Pregnancy

- No Tier 2 methods are harmful if a pregnancy occurs
- Get reliable dating if pregnancy to be continued
- Risk in actual use is 9 to 12 pregnancies in 100 women/year
Adverse Event: VTE and Combined Hormonal Methods

- Estrogen associated increased pro-thrombotic proteins and VTE
- Well designed prospective studies do not support difference in risk among progestins or between oral and transvaginal route
  - EURAS and Igenix both retrospective design
  - Kaiser Study prospective and included oral, patch, and ring
- Absolute risk ranges among studies from 3 to 9 additional events per 10,000 Women Years

Identify VTE Risk Factors

- Family or personal history of VTE
- Inherited thrombophilias
- Increasing age
- Obesity
- Pregnancy/post-partum
- Prolonged immobilization
- Therapeutic use of estrogen, specifically EE

First 3 months of use in new start

- 25-50% first-time VTE no identifiable risk factors

Discuss VTE Risk in Perspective

Risk
VTE/10,000 Women Years

FDA Drug Safety Communication. 2013
Side Effect:
Unscheduled Bleeding/Spotting

- **First look for underlying problems**
  - Inconsistent use
  - Cigarette smoking
  - Interactions with other medications
  - Untreated STD
  - Pregnancy
  - Neoplasia s/a polyps or fibroid
Unscheduled Bleeding on Extended Use

- **53.7% had none** on continuous 168 day drospirenone 3mg/EE 30mcg
  - Women with heavier daily flow on a 21/7 regimen are more likely to have unscheduled bleeding and occurs earlier in regimen

- Extended Use: Fewest days bleeding in extended cycles where **woman chooses timing of 4-day HFI after 3-day bleeding or spotting** over 13 cycles (40±30 vs. 52±35 per year)

Managing Unscheduled Bleeding

- If 21 days CHC completed, take 3 to 4 day HFI
- Complete 3 weeks CHC use before taking another HFI
- If using monthly withdrawal, wait a few more cycles
  - Consider increase EE dose to 30 or 35 mcg
  - Consider vaginal ring
## Side Effects: Headache, Nausea, Breast Tenderness

<table>
<thead>
<tr>
<th>Symptom</th>
<th>30 ug OC</th>
<th>Patch</th>
<th>Ring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headache</td>
<td>22.1%</td>
<td>21.9%</td>
<td>5.8%</td>
</tr>
<tr>
<td>BTB (month 1)</td>
<td>11.4%</td>
<td>18.3%</td>
<td>5.8%</td>
</tr>
<tr>
<td>Nausea</td>
<td>18.3%</td>
<td>20.4%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Mastalgia</td>
<td>5.8%</td>
<td>18.7%</td>
<td>2.6%</td>
</tr>
</tbody>
</table>

Dieben et al. *Obstet Gynecol*. 2002; 100:585-93
Persistent Myth: Weight Gain

• The most important source of information regarding side effects of oral contraceptives - the woman’s own experience\(^1\)
  - 74% believe oral contraceptives increase risk of weight gain, despite lack of scientific evidence

• **Three placebo-controlled RCTs did not find association of weight gain with COC or combined skin patch**\(^2\)

Age Related Changes in Weight

Women Age 19-26 y
(when compared to their 12-20 y.o. self)

- 85% Maintain Status
- 14% Shift into Obesity
- 1% Shift Out of Obesity

Weight: Later Reproductive Years

- Weight Gain Women Age 37-44 y within 4 years

  - Women in the 35-39y and 40-44y cohorts were more likely to gain ≥ 10 lb than women in the 45-49y cohort

  - Women who were normal weight at baseline were more likely to gain ≥ 10 lb than overweight or obese women

The Obese Teen

- DMPA is USMEC Category 2
  - Obese teen DMPA users had significant weight gain
  - Not seen in adults of any weight or non-obese teens
Persistent Myth: Taking Breaks

- Does long term use of any Tier 2 convey risk?
  - Duration of use – no
  - Medical conditions and age acquired during use – possibly
- Taking a break more likely to increase risk rather than reduce
  - Resumption of heavy bleeding
  - Unintended pregnancy
  - Bump in VTE risk after restart - “The greatest risk of VTE is present after initially starting a COC or restarting following a 4 week or greater pill-free interval of the same or a different COC.”

Persistent Myth: Taking “Extra” Hormones

• Simply the *experience* of side effects did not determine women’s decision to continue or change contraception

• The *significance* of the side effects to the woman determined course of action

  • **Women with concern about nature of hormones used less effective method or no method of contraception**

Cheung E, Free C. *Contraception*. 2005;71:426-31
PK: Oral, Vaginal, and Transdermal

Data from NuvaRing® & Evra® NDA submissions
Data on file, Organon USA Inc.
Tier 2 Rate of Continuation

Less Effective Methods

Male Condom

18%

Female Condom

21%

Withdrawal

22%

Sponge

24% parous women
12% nulliparous women

Fertility-Awareness Based Methods

JANUARY

[1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4]

24%

Spermicide

28%

* The percentages indicate the number out of every 100 women who experienced an unintended pregnancy within the first year of typical use of each contraceptive method.

Updated Fertility Awareness

- **Two Day Method**
  - Check cervical secretions twice daily.
  - If secretions present “today” or “yesterday” then abstain from intercourse
  - International efficacy study, n=450\(^1\)
    - Perfect use 96.5% effective
    - Typical use 86.5% effective
  - Can be initiated Quick Start\(^2\)

Not to be Forgotten: Emergency Contraception

• Copper IUD postcoital insertion
  • Insert up to 5 days after unprotected intercourse
  • Do not use in presence of active STI
  • 99.9% effective
  • Provides ongoing contraception

Oral EC:
No Medical Contraindications

- Plan B One-Step® / generics 1.5 mg levonorgestrel
  - Administer immediately or up to 72 hours (120 hours)
  - 46-85% effective

- Ella® ulipristal acetate 30 mg – a 2nd generation anti-progesterone
  - Administer immediately or up to 72 hours (120 hours)
  - 62-85% effective

- Conflicting data on reduced efficacy with increased weight.