Contraceptive Challenges: Crowd Sourced Questions & Answers

Women’s Health Primary Care Update: Challenges in Clinical Care
November 28, 2013

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Faculty/Presenter Disclosure

Faculty:
• Marisa Collins

Relationships with commercial interests:
• None to declare
Faculty/Presenter Disclosure

Faculty:
• Nicole Pasquino

Relationships with commercial interests:
• Argyle Communications, on behalf of Church and Dwight (Trojan and First Response)

Mitigating Potential Bias:
• No information directly relating to these products or their manufacturers will be discussed.
Faculty/Presenter Disclosure

Other:
Marisa Collins, Medical Director, Options for Sexual Health (Opt)
Nicole Pasquino, Clinical Practice Leader, Options for Sexual Health (Opt)

Disclosure:
Opt is a not-for-profit organization that generates some revenue from sales of a limited formulary of contraceptives.

Mitigating potential bias:
This presentation includes a range of contraceptive options available in Canada, with focus on evidence for effectiveness.
Disclosure

Some evidence-based off label* uses may be discussed:

• *all are evidence-based
• *are marked with asterisk
Acknowledgements

- Association of Reproductive Health Professionals (ARHP) [http://www.arhp.org](http://www.arhp.org)
- The Society of Obstetricians and Gynaecologists of Canada (SOGC) [http://sogc.org](http://sogc.org)
- Judith Soon, BSc(Pharm), RPh, PhD
- Ellen Wiebe, MD, CFPC, FCFP
- Many MD and RN colleagues
Learning objectives

• Discuss management of a range of contraceptive questions and challenges shared by fellow attendees
Following the presentation…

• Following this presentation the complete slide set will be available
• The link is in your syllabus doesn’t work :^(…
• We’ll get it to you ASAP!
Unintended Pregnancy in the US

6.7 MILLION PREGNANCIES over one year

**Intended:** 51%

**Unintended:** 49%

- **Unintended births:** 51%
- **Elective abortions:** 23%
- **Fetal losses:** 21%

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Harmony

• 17 ya
• She has had sexual intercourse with two male partners and does not have a regular partner
• Would like to “start taking birth control just in case”
• There is nothing remarkable in Harmony’s history - in relation to menses, medical conditions, family history, or her preconceived ideas about contraception.
When discussing contraceptive options with patients like Harmony, which contraceptive method do you most often begin the conversation with?
iClicker Question #1

... which contraceptive method do you most often begin the conversation with?

A – Combined oral contraceptives (COC)
B – Intrauterine devices (IUD) &/or systems (IUS)
C – Barrier methods (e.g. condoms)
D – Vaginal ring
E – Progesterone only pills (POP)
Contraceptive Counselling

Order of presentation probably matters:

• In one study (11 European countries), just under half chose some other Combined Hormonal Contraceptive Method (CHC) than originally planned
• Ring use nearly quadrupled.
• In another study (USA), long acting reversible contraception was chosen by $\sim \frac{3}{4}$
• Contraception costs were covered.

Current Contraceptive Options

<table>
<thead>
<tr>
<th>Extremely effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective &gt;99% of the time</td>
</tr>
<tr>
<td>Male/Female Sterilization</td>
</tr>
<tr>
<td>IUD/IUS</td>
</tr>
<tr>
<td>Implants</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Very effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective &gt;92% of the time</td>
</tr>
<tr>
<td>Pills</td>
</tr>
<tr>
<td>Injectable</td>
</tr>
<tr>
<td>Patch</td>
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<tr>
<td>Ring</td>
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<table>
<thead>
<tr>
<th>Moderately effective</th>
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</thead>
<tbody>
<tr>
<td>Effective ~80% of the time</td>
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<tr>
<td>Male/Female Condom</td>
</tr>
<tr>
<td>Withdrawal</td>
</tr>
<tr>
<td>Sponge</td>
</tr>
<tr>
<td>Diaphragm</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Effective</th>
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<tbody>
<tr>
<td>Effective up to 75% of the time</td>
</tr>
<tr>
<td>Fertility Awareness</td>
</tr>
<tr>
<td>Cervical cap (Spermicide)</td>
</tr>
</tbody>
</table>

Typical Effectiveness of Contraceptive Methods

**Most effective**
- < 1 pregnancy/100 women in 1 year
- 6–12 pregnancies/100 women in 1 year

**Least effective**
- >17 pregnancies/100 women in 1 year

Levonorgestrel Intrauterine System (LNG 52 IUS)

- Brand name: Mirena®
- 20 mcg levonorgestrel/day
- Approved for 5 years of use
- Decreased menstrual flow – indications for menorrhagia, dysmenorrhea, and anemia
- Amenorrhea in ~20% of users by 1 year
- ~ $410

Levonorgestrel Intrauterine System (LNG 52 IUS)

Long-acting, progestin-only intrauterine contraceptive method:
- contains 52 mg of levonorgestrel
- releases 20 $\mu$g of levonorgestrel per day initially; rate decreases progressively to 10 $\mu$g/day after 5 years
- approved for 5 years of use; new data demonstrate up to 7-year efficacy*

*Wu JP, Pickel S. Contraception 2014
Levonorgestrel Intrauterine System (LNG 52 IUS)

Mechanism of Action:
• thickens the cervical mucus - inhibits sperm motility and function.
• a consequence of the high endometrial levels of LNG is endometrial atrophy - leads to a substantial decrease in menstrual flow and absence of bleeding in some women.
Levonorgestrel Intrauterine System (LNG 52 IUS)

Candidates:
- all women of reproductive age, seeking long-term, highly effective contraceptive
- especially appropriate for…:
  - looking for a “forgettable” method
  - menstrual symptoms - similar to long-acting, progestin-only DMPA ("Depo"), generally improves menorrhagia, dysmenorrhea, and anemia
  - lactating women
Levonorgestrel Intrauterine System (LNG 52 IUS)

Advantages:

• may reduce menstrual symptoms in women with uterine fibroids or adenomyosis, thereby reducing the need for hysterectomy
• data from the United Kingdom suggest that use of the LNG-52 IUS may reduce the occurrence of benign endometrial polyps in patients who have breast cancer and are taking tamoxifen
• can be used by lactating women
• decreases the risk of PID and ectopic pregnancy relative to non-use.
Levonorgestrel Intrauterine System (LNG 52 IUS)

Contraindications (modified from WHO criteria):

- Puerperal sepsis
- Immediate post-septic abortion
- Unexplained vaginal bleeding before evaluation
- Malignant gestational trophoblastic disease
- Cervical cancer or dysplasia awaiting treatment
- Current breast cancer
- Endometrial cancer
- Distorted uterine cavity, from fibroids or other cause (makes insertion difficult, but is possible to use)
- Current PID (initiation of IUS only)
- Current purulent cervicitis or known chlamydial infection or gonorrhea or genital actinomycosis at initiation.
Levonorgestrel Intrauterine System (LNG 52 IUS)

Disadvantages:

- **Uterine perforation** - rare complication (1/1000) occurring at the time of insertion (but rate may vary with skill).
- **Expulsion rates** from 2% to 12%; most in first few months following insertion, decreasing thereafter.
- **Enlarged ovarian follicles** have been diagnosed in ~12%. Most are asymptomatic, although some may be accompanied by pelvic pain or dyspareunia. Usually disappear spontaneously during 2-3 months of observation; surgical intervention is usually not required.
- **Obese women** have an elevated risk of dysfunctional uterine bleeding and endometrial neoplasia, so the LNG-52 IUS may be an appropriate choice in these women.
Levonorgestrel Intrauterine System
(LNG 52 IUS)

Counseling:

- may experience progestin-related side effects - eg. mood changes, acne, headache, breast tenderness, follicular ovarian cysts
- may experience an increased number of bleeding and spotting days and irregular bleeding patterns during the first 3–6 months of use; thereafter, the number of bleeding and spotting days usually decreases, but bleeding may remain irregular
- Breast tenderness and nausea are uncommon
Levonorgestrel Intrauterine System (LNG 52 IUS)

Counseling cont’d:

• Does not increase risk of STIs, tubal infertility, or ectopic pregnancies
• Explain non-contraceptive benefits and possible menstrual changes
• Describe how to check for the string, follow-up visits, and warning signs.
References


Based on content submitted by ARHP’s Clinical Advisory Committee for Choosing a Birth Control Method in May 2009, with updates
Levonorgestrel Intrauterine System (LNG 13.5 IUS)

- Brand name: Jaydess®
- 14 mcg levonorgestrel/day
- Approved for 3 years of use
- Amenorrhea in ~6% of users by 1 year
- Not indicated for menorrhagia, dysmenorrhea
- ~ $330

Levonorgestrel Intrauterine System (LNG 13.5 IUS)

Differences from the 52mg IUS:
• releases 14 µg of levonorgestrel per day initially; rate decreases progressively to 5 µg/day after 3 years
• approved for 3 years of use - this decreases its cost effectiveness
• smaller: 13.5mg measures 1.1 by 1.2 inches compared to the 52mg at 1.3 square inches - may result in slightly easier and less painful insertion
• less likely to lead to amenorrhea
• not been shown to be an effective treatment for heavy menstrual bleeding
• a 3-year expulsion rate of 3.2% (54 out of 1665 subjects) was reported (time will tell if actually less than the 52mg)
Possible caution

• In earlier studies, when a patient did become pregnant with the low dose progestin IUD (which is rare), 50% of the time it was an ectopic pregnancy

Counselling:

• In rare event of a pregnancy, the location of the pregnancy should be determined urgently
Levonorgestrel Intrauterine System (LNG 13.5 IUS)

Who might choose this IUS over the 52?:

- want lighter periods but feel wary of having no period at all
- prefer an IUD that doesn't stop their monthly period but doesn’t make it heavier (cf. Copper IUD)
- need or want less long term contraception than the LNG 52 IUS offers
- are ok with the reduced cost efficiency potential.
References


- New Low-Dose Levonorgestrel-Releasing IUD (Skyla). The Medical Letter 2013; 1412: 21-23


Based on content submitted by ARHP’s Clinical Advisory Committee for Choosing a Birth Control Method in May 2009, with updates
Copper-T Intrauterine Device (Cu-IUD)

- Brand names: Flexi-T®, Liberte®, Mona Lisa®, Nova-T®
- Copper ions
- Approved for 5-10 years of use
- Can be used as emergency contraceptive

www.youtube.com/watch?v=FuPFbgSm0QQ

Copper-T Intrauterine Device (Cu-IUD)

Long-acting, hormone-free intrauterine contraceptive method:

• vertical stem of the device is wound with fine copper wire, and the two horizontal arms may also have a sleeve of copper

• depending on the device, the Cu-T IUD is approved for 5-10 years of use; however, efficacy may last for 12* years or more for some devices
Copper-T Intrauterine Device (Cu-IUD)

Mechanism of Action:

- exact mechanism of action of the copper IUD is not clear; however, substantial evidence suggests that the primary mechanism of action is prevention of fertilization.
- Copper-containing IUDs reduce the motility and viability of the sperm and the development of ova.
- Research shows that sperm counts found in the cervical mucus and uterine tube are much lower in women using IUDs than those in nonusers.
- A clinical study found that women using copper-containing IUDs had uncoordinated contractions, which suggests that the device may also act by hindering sperm transport.
Copper-T Intrauterine Device (Cu-IUD)

Candidates:

• desire long-term contraception
• do not want, cannot tolerate, or contraindicated for the systematic effects of hormones
• desire a quickly reversible method
• don’t naturally have heavy or crampy periods
Copper-T Intrauterine Device (Cu-IUD)

Advantages:

• fertility returns rapidly after removal of the copper IUD

• **no ongoing cost** after insertion; **low cost over time** cf. hormonal methods

• Copper-T IUD may be associated with a decreased risk for endometrial cancer, but the exact mechanism for this association is unclear
Copper-T Intrauterine Device (Cu-IUD)

Contraindications (WHO Criteria):
- Puerperal sepsis
- Immediate post-septic abortion
- Unexplained vaginal bleeding before evaluation
- Malignant gestational trophoblastic disease
- Cervical cancer or dysplasia awaiting treatment (when IUD initiated)
- Endometrial cancer
- Distortion of the uterine cavity by uterine fibroids or other cause
- Current STI or PID (when IUD initiated)
- Known pelvic TB (when IUD initiated)
Copper-T Intrauterine Device (Cu-IUD)

Disadvantages:

• **Menstrual changes** - can increase the duration and amount of menstrual flow and menstrual cramping

• **Expulsion**, in only 5% of users - but is the **most likely cause of IUC failure**; most common within the first three months after insertion.

• **Uterine perforation is a rare**, occurring approximately once every 770 to 1600 insertions. Perforation generally occurs at insertion, when a portion of the device becomes embedded in the uterine wall.
Copper-T Intrauterine Device (Cu-IUD)

Disadvantages cont’d:

• Studies suggest that women with chlamydial infection or gonorrhea at the time of IUD insertion were at an increased risk of PID relative to women without infection.

• The absolute risk of PID was low for both groups (0-5% for those with STIs and 0-2% for those without).
Copper-T Intrauterine Device (Cu-IUD)

Counselling:

- Describe key advantages, disadvantages
- Inform women that IUDs do not cause an increased risk of STIs, tubal infertility, and ectopic pregnancies
- Describe how to check for the string, follow-up visits, and warning signs
References


Based on content submitted by ARHP’s Clinical Advisory Committee for *Choosing a Birth Control Method* in May 2009, with updates.
Copper-T IUDs

- Amount of copper appears to correlate with effectiveness
- IUDs with copper sleeves on the transverse arms puts the copper closer to the fundus – more effective
- Flexi T +380, Liberte TT380, Mona Lisa 10

- Body of IUDs is polyethylene plastic with barium sulphate – radio-opaque

## RESOURCE: Copper-T IUDs

### Flexi-T®

<table>
<thead>
<tr>
<th>Brand</th>
<th>Duration (years)</th>
<th>Indication</th>
<th>Cost</th>
<th>Copper (mm²)</th>
<th>Copper placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexi-T 300</td>
<td>Up to 5</td>
<td>Nullip</td>
<td>~ $87</td>
<td>300</td>
<td>Body</td>
</tr>
<tr>
<td>Flexi-T +300</td>
<td>Up to 5</td>
<td>Multip</td>
<td>~ $97</td>
<td>300</td>
<td>Body</td>
</tr>
<tr>
<td>Flexi-T +380</td>
<td>Up to 5</td>
<td>Multip</td>
<td>~ $97</td>
<td>380</td>
<td>Body &amp; Arms</td>
</tr>
</tbody>
</table>
## RESOURCE: Copper-T IUDs

### Liberte®

<table>
<thead>
<tr>
<th>Brand</th>
<th>Duration (years)</th>
<th>Indication</th>
<th>Cost ($)</th>
<th>Copper (mm²)</th>
<th>Copper placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberte Short UT380</td>
<td>5</td>
<td>Nullip or uterine cavity &lt; 7cm</td>
<td>~ $70</td>
<td>380</td>
<td>Body</td>
</tr>
<tr>
<td>Liberte Standard UT380</td>
<td>5</td>
<td>Unip, Multip or uterine cavity &gt; 7cm</td>
<td>~ $70</td>
<td>380</td>
<td>Body</td>
</tr>
<tr>
<td>Liberte Standard TT380</td>
<td>10</td>
<td>Unip, Multip or uterine cavity &gt; 7cm</td>
<td>~ $80</td>
<td>380</td>
<td>Body &amp; Arms</td>
</tr>
</tbody>
</table>
# RESOURCE: Copper-T IUDs

## Mona Lisa®

<table>
<thead>
<tr>
<th>Brand</th>
<th>Duration (years)</th>
<th>Indication</th>
<th>Cost ($)</th>
<th>Copper (mm²)</th>
<th>Copper placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mona Lisa N</td>
<td>3</td>
<td>Nullip or Parous w small uterus</td>
<td>~ $63</td>
<td>300</td>
<td>Body</td>
</tr>
<tr>
<td>Mona Lisa 5</td>
<td>5</td>
<td>Parous wanting future preg</td>
<td>~ $63</td>
<td>380</td>
<td>Body</td>
</tr>
<tr>
<td>Mona Lisa 10</td>
<td>10</td>
<td>“Done having children”</td>
<td>~ $81</td>
<td>380</td>
<td>Body &amp; Arms</td>
</tr>
</tbody>
</table>
##RESOURCE: Copper-T IUDs

### Nova - T®

<table>
<thead>
<tr>
<th>Brand</th>
<th>Duration (years)</th>
<th>Indication</th>
<th>Cost ($)</th>
<th>Copper (mm²)</th>
<th>Copper placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nova - T</td>
<td>2</td>
<td>Women of childbearing age</td>
<td>~ $210</td>
<td>200 (with silver core)</td>
<td>Body</td>
</tr>
</tbody>
</table>
Frameless Copper IUD

- Brand name: GyneFix®
- 6 or 4 copper beads, affixed to fundus
- 330 or 200 mm²
- In Canada: **Research protocol only:** previous IUD with excessive bleeding, pain, expulsion
- Available in Europe for 20 years; not likely here any time soon
- Willow Women’s Clinic, Vancouver – no longer accepting study participants
Characteristics of All Intrauterine Contraception

- Very high patient satisfaction
- Rapid return of fertility
- Safe
- Long-term protection
- Highly effective
- May be inserted after delivery or abortion

Choosing Appropriate Intrauterine Contraception

**Copper-T IUD**
- Wants regular menses
- Does not want hormones
- No history of dysmenorrhea
- No history of menorrhagia

**LNG 13.5, LNG 52 IUS**
- Amenorrhea acceptable
- Irregular bleeding tolerable
- History of dysmenorrhea or menorrhagia (LNG 52 IUS)
Harmony, 17 ya - continued

- Harmony has decided to get a Levonorgestrel Intrauterine System (IUS)
- Her mom has a “Mirena” and she also has extended medical coverage
- Harmony doesn’t anticipate wanting to get pregnant in the next 5-7 years, but she doesn’t like the higher likelihood of amenorrhea with the LNG 52 IUS (Mirena) ~ 20%
- She chooses an LNG 13.5 IUS (Jaydess) and makes an appointment for insertion next week.
Harmony, 17 ya - continued

You counsel on major risks and adverse effects relevant to her, and document the consent discussion:

- Perforation (rare)
- Expulsion, esp in first few mo. – how to check for markers
- Small increased risk of pelvic infection associated with insertion (first 3 wk following)

Adverse effects:

- Breakthrough/irregular bleeding (esp in 1st few months)
- Potential progestin side effects, incl. ovarian cysts

And you advise:

- In unlikely case of pregnancy, immediately determine location of implantation (to rule out ectopic).
Harmony, 17 ya - continued

• It’s already been a long counselling session, & your waiting room is full

This encounter has raised some questions in your mind...
Which timing strategy do you recommend for placing an Intrauterine Contraceptive?
iClicker Question #2

Which timing strategy do you recommend for placing an Intrauterine Contraceptive?

A – During menses
B – Within 7 days of menses
C – Up until day 12 of the cycle
D – Any time, so long as a woman is reasonably sure she isn’t pregnant
E – Any time, regardless of pregnancy risk
Timing IUD/IUS Insertion

• According to the product monographs:
  ▪ e.g. Nova-T to be inserted at the end of menses
  ▪ LNG-IUS to be inserted within seven days of the onset of menses.
Timing IUD/IUS Insertion

• According to the product monographs:
  ▪ e.g. Nova-T to be inserted at the end of menses
  ▪ LNG-IUS to be inserted within seven days of the onset of menses.

• Potentially creates barriers due to scheduling, access for multiple visits, chance of interval pregnancy if the woman is inadequately protected
Timing IUD/IUS Insertion

• According to the World Health Organization’s Selected Practice Recommendations (WHO SPR)
  o Copper IUD can be inserted in all women up until day 12 of the cycle
  o LNG-IUS can be inserted up to day 7

• IUD/IUS can also be inserted if a woman is reasonably certain not to be pregnant.
RESOURCE: WHO Selected Practice Recommendations (SPR)

• Provides practical information about contraceptive management – initiation, follow-up, and discontinuation
• Designed for use in high and low-resource settings.

• Download it here!
• WHO Website
  or search “WHO SPR"
Ruling out Pregnancy*

You can be reasonably certain that a woman is not pregnant if:

No symptoms of pregnancy and meets any of these criteria:

- has not had intercourse since last normal menses
- has been correctly and consistently using a reliable method of contraception
- is within the first 7 days after normal menses
- is within 4 weeks postpartum for non-lactating women
- is within the first 7 days post-abortion or miscarriage
- is fully or nearly fully breastfeeding, amenorrheic, and less than 6 months postpartum

* Some clinics and hospitals require a negative urine pregnancy test.
iClicker Question #3

By which approach do you recommend performing STI screening prior to insertion of an Intrauterine Contraceptive?
iClicker Question #3

By which approach would you recommend performing STI screening prior to insertion of an Intrauterine Contraceptive?

A – Screen on first visit; insert on subsequent visit
B – Screen all patients on day of insertion
C – Screen selected patients on day of insertion, based on risk factors
D – Provide routine antibiotic prophylaxis, regardless of screening approach
E – Do not offer IUD to patients at risk for STI
STI screening and IUDs

• Risk of PID with insertion of an IUD is very low ~ 0.5%
• All women should be screened by both history and physical examination to assess risk of sexually transmitted infection
• Same day STI screening by standard risk factors only (<25, multiple partners) is as effective at reducing infection as a two-day visit screening approach

STI screening and IUDs

- Not enough evidence to support routine screening for bacterial vaginosis in asymptomatic women at the time of insertion.
- Routine use of prophylactic antibiotics is not recommended prior to intrauterine device insertion, although it may be used in certain high-risk situations.
- Avoid insertion if overt signs of infection.
- Prophylaxis for subacute bacterial endocarditis (SBE) is not indicated.

Best Practices to Minimize Risk of Infection With Intrauterine Device Insertion

Abstract

Background: Intrauterine devices provide an extremely effective, long-term form of contraception that has the benefit of being reversible. Historically, the use of certain intrauterine devices was associated with increased risk of pelvic inflammatory disease. More recent evidence suggests that newer devices do not carry the same threat; however, certain risk factors can increase the possibility of infection.

Objectives: To review the risk of infection with the insertion of intrauterine devices and recommend strategies to prevent infection.

Outcomes: The outcomes considered were the risk of pelvic inflammatory disease, the impact of screening for bacterial vaginosis and sexually transmitted infections including chlamydia and gonorrhea, and the role of prophylactic antibiotics.

Evidence: Published literature was retrieved through searches of PubMed, Embase, and The Cochrane Library on July 21, 2011, using appropriate controlled vocabulary (e.g., intrauterine devices, pelvic inflammatory disease) and key words (e.g., adenitis, endometritis, IUD). An editorial filter was applied in PubMed. The search was limited to the years 2000 forward. There were no language restrictions.

Grey (unpublished) literature was identified through searching the web sites of national and international medical specialty societies.

Values: The quality of evidence in this document was rated using the criteria described in the Report of the Canadian Task Force on Preventative Health Care (Table).

Recommendations

1. All women requesting an intrauterine device should be counselled about the small increased risk of pelvic inflammatory disease in the first 20 days after insertion. (II-2A)
2. All women requesting an intrauterine device should be screened by both history and physical examination for their risk of sexually transmitted infection. Women at increased risk should be tested prior to or at the time of insertion; however, it is not necessary to delay insertion until results are returned. (II-2B)
3. Not enough current evidence is available to support routine screening for bacterial vaginosis at the time of insertion of an intrauterine device in asymptomatic women. (II-2C)
iClicker Question #4

What approach to analgesia / anaesthesia to you recommend for IUD / IUS insertion?
iClicker Question #4

What approach to analgesia / anaesthesia to you recommend for IUD / IUS insertion?

A – Topical lidocaine spray or gel
B – Oral non-steroidal anti-inflammatory agents (NSAID)
C – Cervical priming with misoprostol
D – Paracervical block
E – None of the above
More studies needed

- Systematic review; 4 studies met inclusion criteria
- No interventions that have been properly evaluated reduce pain during or after IUD insertion

Allen et al. *The Cochrane Library* 2009
Management of pain associated with the insertion of intrauterine contraceptives

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Pain Management

• Most intrauterine contraception (IUC) placements do not require pain relief. However, small proportions of nulliparous (~17%) and parous (~11%) women experience substantial pain that needs to be proactively managed.

• Systematic review 1980 – 2012
• 17 studies
• Looked at: oral NSAID analgesia, cervical “priming”, pre-insertion local anaesthesia (topical/injection), opioid analgesia, pre-insertion counselling

Genzell-Danielsson et at. Human Reproduction Update 2013
Pain Management - NSAID

“Most of the regimens studied were adopted from hysteroscopy or abortion, and effectiveness in specific subsets of women has not been studied adequately”.

• They concluded that non-steroidal anti-inflammatory agents (NSAID) may be effective in reactively treating post-insertion pain, but no benefit was found with prophylactic use.

Genzell-Danielsson et at. Human Reproduction Update 2013
Pain Management

• No conclusive evidence that any prophylactic pharmacological intervention reduces pain associated with IUC insertion

• “Women’s anxiety about the procedure may contribute to higher levels of perceived pain, which highlights the importance of counselling, and creating a trustworthy, unhurried and professional atmosphere in which the experience of the provider also has a major role; a situation frequently referred to as ‘verbal anaesthesia’”.

Pain Management

Practical advice for avoidance of pain associated with insertion of intrauterine contraceptives

Luis Bahamondes, Diana Mansour, Christian Fiala, Andrew M Kaunitz, Kristina Gemzell-Danielsson

Pain Management – Misoprostol cervical priming

- Although misoprostol has been studied extensively for cervical priming to ease IUC placement, the data are conflicting.
- Several studies have suggested that while misoprostol priming may permit easier passage of the IUC, it is not effective in reducing pain; it may, in fact, increase overall procedural pain, often due to uterine cramping.

Pain Management

“No preventative pharmacological intervention has been adequately evaluated in an RCT setting and been shown to significantly reduce pain associated with IUC placement”.

“General considerations, including pre-placement counselling, the setting in which the actual procedure is performed, the confidence and technique of the clinician and the interplay between the HCP and assistant, can positively or negatively impact on a woman’s level of anxiety and therefore potentially influence her perception of pain as well as her overall experience.”

Pain Management

• Ongoing efforts are required to refine the optimal strategy for managing pain associated with IUC placement and to improve women’s experience of the procedure.

Pain Management – Lidocaine

**Lidocaine gel:**


- **NO EFFECT**


- **NO EFFECT**


- **NO EFFECT**


- « **Topical or intracervical 2% lidocaine gel prior to IUD insertion does not decrease pain scores.** Although attempts at providing pain relief with IUD insertion have been disappointing, the benefits of IUDs are profound ». 
Paracervical block:

- Compared with no anesthetic, a 1% lidocaine paracervical block did not result in a statistically significant decrease in perceived pain with IUD insertion.
Pain Management

Paracervical block:

- Retrospective chart review results: Statistically significant differences were found - with “nulliparous women and those who received local anaesthesia reporting more insertion pain”.
- Age, IUD type and recent abortion status did not affect insertion pain. Nulliparous women did not experience significantly more insertion difficulty or complications, nor did they have higher rates of expulsion or removal at follow-up.
Pain Management

Paracervical block:

• “These findings suggest that the practice of providing cervical anaesthesia at IUD insertion may cause slightly more pain, without any obvious additional benefit. The difference in insertion pain by parity, although statistically significant, is small enough to be of questionable clinical importance.”

• “Overall, these findings add to the growing body of evidence for IUDs being safe and well-tolerated in nulliparous women.”