



Zoom and Learn Roundtable:
Intrauterine Device Update

Dr. Sarah Yager, MD CCFP

Conflict of Interest Disclosures

- ▶ **Grants/Research Support:** None
- ▶ **Speakers Bureau/Honoraria:** Merck, Organon
- ▶ **Consulting Fees:** None

- ▶ **Mitigation:**
 - ▶ I will not be speaking about products from these companies.
 - ▶ I will use generic names where possible, and the information is guideline based.

Learning Objectives

- ▶ Gain efficiency in counseling patients on IUD/IUS options
- ▶ Gain evidence-based approach to address common patient concerns
- ▶ Review SOGC guidance on contraception management in the pandemic

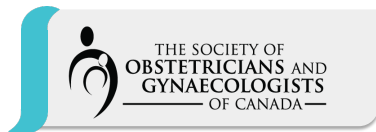
Case #1: 16 yo GOPO

- ▶ Books an appointment to talk about birth control. What questions do you have?
- PMHx:
 - Asthma
 - Ovarian cyst seen on U/S for done for AUB, simple, no need for f/u
- Menstrual hx:
 - Menarche at age 11
 - Periods very irregular at the start, regular q28 days
 - Very painful periods, missing 2 days of school/month
- Contraception History:
 - Tried 2 different COCs, helped with periods, but 'The hormones really messed me up'
 - Sexually active, currently using condoms

Case #1: 16 yo GOPO

- Anything else you want to know?
- What options would be best for her?
- In what order would you offer them?

Canadian Position Statements on LARCs



Canadian Contraception Consensus

“LARCs are the **most effective method of reversible contraception**, have high continuation rates, and should be considered when presenting contraceptive options to any woman of reproductive age.”¹



Contraceptive care for Canadian Youth

“This statement recommends using **LARCs as first-line contraception for Canadian youth**....[These methods] have the lowest failure rate and are first-tier options.”²

LARCs, long-acting reversible contraceptives
Black A et al. *J Obstet Gynaecol Can* 2015;37:936-42; 2. Di Meglio G et al. *Paediatr Child Health* 2018;23:271-7.

Tiered Effectiveness Counselling

Two key questions to determine a patient's initial goals¹

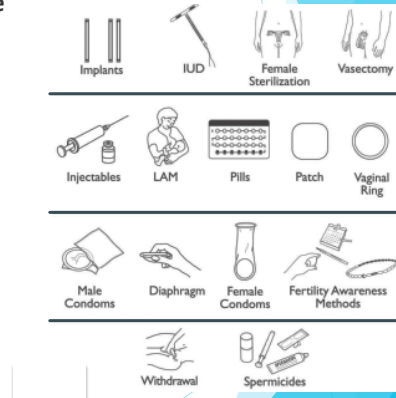
- When do you want to become pregnant?
- How important is it NOT to be pregnant until you are ready?

More effective



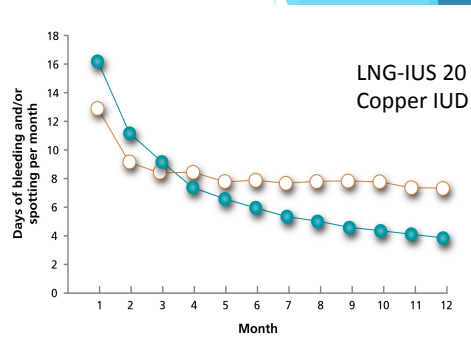
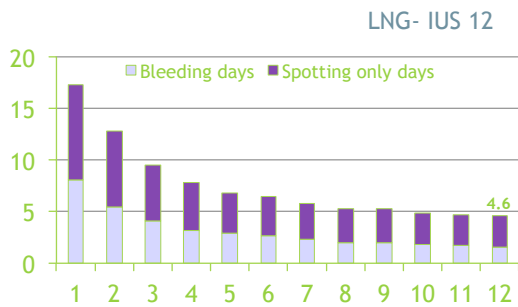
Less effective

WHO model of tiered contraceptive effectiveness²



IUD, intrauterine device; LAM, lactational amenorrhea method; WHO, World Health Organization
 1. Project EmpowHER. projectempowher.ca/empowher-q; 2. Stanback J et al. *Glob Health Sci Pract* 2015;3:352-7.

Non contraceptive benefits



- ▶ LNG - IUS 20: menstrual flow decreased 74% to 98%
- ▶ LNG IUS 20: Shown to help endometriosis and adenomyosis
- ▶ 64-80% randomized to get LNG IUS 20 for heavy menstrual bleeding cancelled hysterectomy compared to 9-14% receiving other treatment*

Andersson et al. *Contraception* 1994; 49(1): 56-72

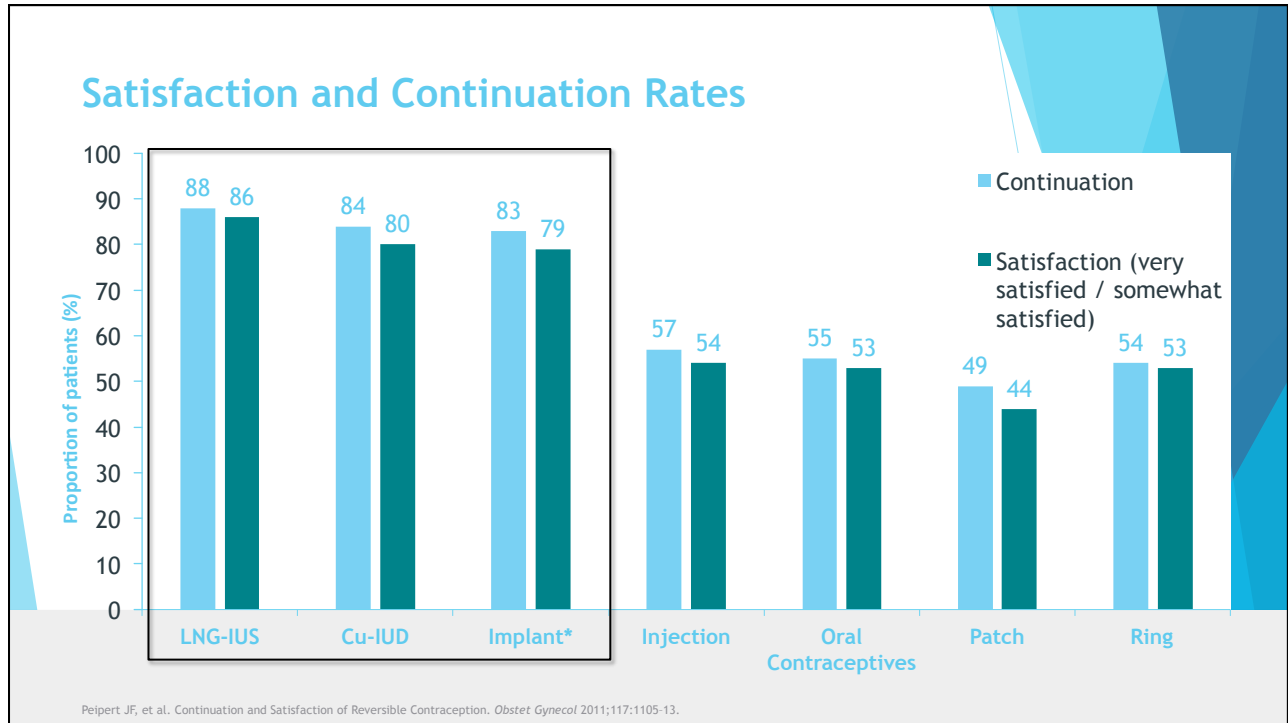
*Hurskainen R, Teperi J, Rissanen P, Aalto AM, Grenman S, Kivelä A, et al. Quality of life and cost-effectiveness of levonorgestrel-releasing intrauterine system versus hysterectomy for treatment of menorrhagia: a randomised trial. *Lancet* 2001;357:273e7.

Case #1: 16 yo GPO

- ▶ After discussion, she is interested in the hormonal IUS, but has some questions for you...
- ▶ “I like the idea of having better periods, but I don’t do well with hormones”

Hormonal Side Effects

- ▶ Difficult to compare hormonal contraception head to head based on serum levels
- ▶ “Not all hormones are created equal.”
- ▶ Generally, compared to COC:
 - ▶ LNG-IUS 20 (Mirena) = 1/20th
 - ▶ LNG-IUS 12 (Kyleena) = 1/30th
- ▶ Removal
 - ▶ LNG - 12% removal for hormonal side effects
 - ▶ Copper - 2% removal claiming hormonal side effects

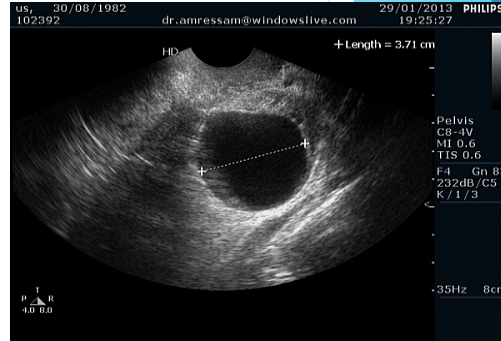


Case #1: 16 yo GOP0

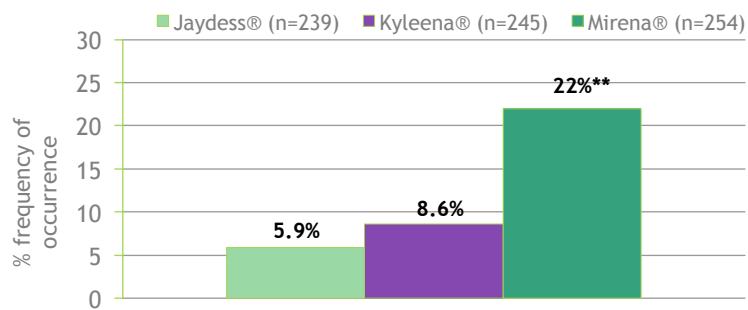
- ▶ She takes home the information to consider, then books another appointment after discussing with her mom
- ▶ "My mom wanted me to ask about my cyst. She also said it can cause a 'tubal pregnancy'?"

Functional Ovarian Cysts

- ▶ Not a contraindication for insertion
- ▶ Usually asymptomatic
- ▶ Do not require further investigation or treatment



Ovarian Cysts[†] (Phase II study)



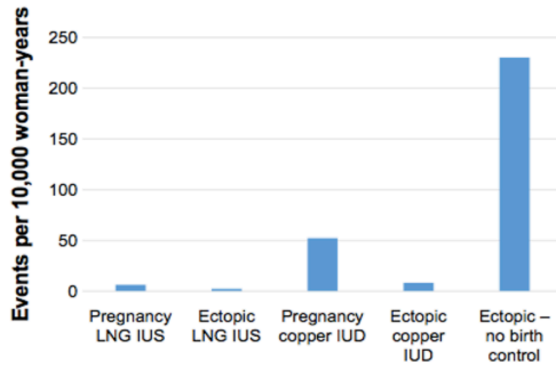
[†]Ovarian cysts were reported as adverse events if they were abnormal, nonfunctional, and/or >3 cm in diameter, regardless of presence or absence of associated symptoms. Data represent % frequency of occurrence over 3 years.

**P<0.0001vs Jaydess[®] and Kyleena[®]

Gemzell-Danielsson et al. Fertil Steril 2012;97:616-622.

What about ectopic pregnancy?

- ▶ Ectopic rate: 1.2-5/1000 of all pregnancies
- ▶ If you become pregnant with an IUD, there's a 15-50% chance it is an ectopic



KEY TAKEAWAY

IUDs lower absolute risk of ectopic pregnancy

Case #1: 16 yo GOPO

- ▶ She decides to go forward with the Mirena IUS. You give her a prescription and book the insertion.
- ▶ The next day she calls your clinic after going to the pharmacy and realized she can't afford it.
- ▶ What are her options?

Fair Pharmacare:

<https://www2.gov.bc.ca/gov/content/health/health-drug-coverage/pharmacare-for-bc-residents/who-we-cover/fair-pharmacare-plan/register-for-fair-pharmacare>

Pharmaceutical Patient Support Program: Care for Contraceptive Choices

<https://bayer.health-loyalty.com/>

Case #2: 29 yo G4P2

- Calls your clinic urgently as a condom broke and she really CAN'T get pregnant
- What can you offer her?

Hot off the Press - January 28 2021 Mirena as Emergency Contraception?!

THE NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Levonorgestrel vs. Copper Intrauterine Devices for Emergency Contraception

David K. Turok, M.D., Alexandra Gero, M.P.H., Rebecca G. Simmons, Ph.D.,
Jennifer E. Kaiser, M.D., Gregory J. Stoddard, M.P.H., Corinne D. Sexsmith, M.S.,
Lori M. Gawron, M.D., and Jessica N. Sanders, Ph.D.

“

In this multicentre randomized trial the levonorgestrel 52 mg IUD was found to be non-inferior to the copper IUD for emergency contraception

”

Emergency contraception

	Copper IUD (Liberte, Flexi-T..)	52 mg LNG IUD (Mirena)	Ulipristal Acetate (Ella)	Levonorgestrel 1. 5mg one dose (Plan B..)
Use from UPI	7 days	5 days	5 days	5 days
Failure Rate	0.01%	0.3%	Up to 2.2%	Up to 3.2%
BMI concerns	nil	nil	>30	>25
Ongoing Contraception	Provided	Provided	Wait 5 days for restart then 14 day back up	Restart then 7 day back up

Dunn S, Guilbert E, Burnett M, Aggarwal A, Bernardin J, Clark V, Davis V, Dempster J, et al. Emergency Contraception. J Obstet Gynaecol Can 2015, 34(9):870-878


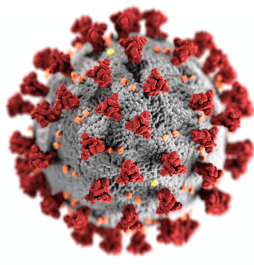
Case #2: 29 yo G4P2

- She has tried the Mirena and decides she wants to go with the Copper IUD
- Can you accommodate this in your clinic on an urgent basis? Where can she go?

<https://raice.ca/>

5 years later, during the 26th wave of the
C19 pandemic....

- She calls urgently and NEEDS to get her IUD replaced ASAP, but you're on lockdown....



Contraception Consensus:
Updated Guidance during Pandemics & Periods of Social Disruption
(April 2020)

Amanda Black, Dustin Costescu, Edith Guilbert, Sheila Dunn, Wendy V. Norman, Konia Trouton, Nicole Todd, Marie Soleil Wagner, Ashley Waddington, Anca Matei, William Fisher, Megan Schneiderman, Michelle Chan, Unjali Malhotra, Jennifer Blake.

Black A, et al. Contraception Consensus: Updated Guidance during Pandemic and Periods of Social Disruption. Society of Obstetricians and Gynaecologists Canada (SOGC). Published April 2020. [Link](#)

MA-M_IUS_12-CA-0108-1

Essential services

- ▶ IUC insertion for contraception
- ▶ Management of IUC complications
- ▶ Emergency contraception
- ▶ In-person contraception for vulnerable groups
- ▶ Post abortion contraception
- ▶ Virtual and online contraception counselling and services

Sample Family Planning Triage

Postpone	Telephone	Virtual	In person as available	In person ASAP
BP for CHC	Refill	Contraceptive Counselling	IUD removal	EC IUD
Asymptomatic IUD switch	EC pills	Method initiation	IUD switch	IUD insertion
		IUD Counselling	IUD Complication Management	IUD Complication Management
		IUD follow up & Complication Management		

Canadian Intrauterine Contraceptives

Intrauterine contraceptive	Duration (years)	C19	Strength (mg/day LNG) (surface area of Cu)	Length (mm)	Width (mm)	Price
LNG IUDs:						
Kyleena (LNG-IUS 12)	5	5	9 average mcg/day	30	28	365-410
Mirena (LNG-IUS 20)	5	7	14 average mcg/day	32	32	365-410
Copper IUDs:						
Flexi-T 300	5	5	300 mm ²	28	23	140-150
Flexi-T 300+	5	5	300 mm ²	32	28	140-150
Flexi-T 380+ (sleeves)	5 (12)	12	380 mm ²	32	28	140-150
Liberte UT 380 Standard	5	7	380 mm ²	35.4	32	96-100
Liberte UT 380 Short	5	7	380 mm ²	28.4	32	96-100
Liberte TT 380 Standard (cuffs)	10 (12)	12	380 mm ²	34	29.9	\$90-100
Liberte TT 380 Short (sleeves)	5	12	380 mm ²	29.5	23.2	\$77
Mona Lisa 10 (sleeves)	10 (12)	12	380 mm ²	35.85	31.85	106
Mona Lisa 5 Standard	5	7	380 mm ²	31.9	31.8	92-100
Mona Lisa N (ST 300)	3 (5)	5	300 mm ²	29	23	92-100
Mona Lisa 5 Mini (380)	5	7	380 mm ²	24	30	92-100

Case #2: 29 yo G4P2....years later

- She's now had the Copper IUD for 5.5 years and is thinking about getting pregnant. She calls the clinic and wants to get the IUD out to 'get her body ready for pregnancy' . She wants to start trying in a 6 months...
- What do you advise her?
- Out now or out later?
- Start new birth control method in the meantime?

Return to Fertility

- ▶ Return to fertility, on average based on contraceptive:
 - ▶ IUS/IUD devices and Implant = 2 cycles
 - ▶ Oral and ring contraceptives = 3 cycles
 - ▶ Patch = 4 cycles
 - ▶ Injectable contraceptives = 5-8 cycles
- ▶ Quickest return to fertility demonstrated with LARC methods
- ▶ No association between lifetime length of use of hormonal contraceptive and fecundity
- ▶ If they are NOT ready for pregnancy, start contraception 7 days BEFORE removal

Yland JJ, Bresnick KA, Hatch EE, et al. Pregravid contraceptive use and fecundability; prospective cohort study, BMJ 2020; 371:m3966.

Summary Points

IUDs are a highly effective, low hormone first tier contraceptive.

IUDs have high continuation and high satisfaction rates at 1 year.

Copper IUDs are the most effective emergency contraceptive available

Contraception is an essential service!

Questions and Comments...

More Information

Canadian Contraception Consensus Guidelines No. 329, (Part 3 of 4: Chapter 7). J Obstet Gynaecol Can 2016 Feb;38(2):182-222.

Canadian Contraception Consensus Guidelines No. 329, (Part 3 of 4: Chapter 8). J Obstet Gynaecol Can 2016;38(3):279-300.

VI Women's Clinic Website:
<http://www.viwomensclinic.ca/>

mdBriefCase website: Women's Health
e.g. "Intra-uterine Contraception; Build your expertise" Free, on-line, and SOGC/CFPC accredited