



# Contraception Review

1 April 2021  
Lesley Roberts, MD FRCSC

### **Faculty Presenter Disclosure**

- Faculty/speaker's name: Lesley Roberts
- Relationships with financial sponsors: None

### **Disclosure of Financial Support**

- The MSERS series has received in-kind support from Indigenous Services Canada in the form of administrative support

### **Mitigating Potential Bias**

- No mitigation has been required. Content in this talk does not relate to any of the above disclosures.



# Who is a Candidate?

**Any woman desiring control over reproductive cycle!**

- Rate of unintended pregnancies in Canada overall: 61%
- Nearly 1/3 of women have at least one induced abortion
- Barrier methods remain most commonly used method of contraception
  - High failure rates

# Contraception Counselling

## **Information Gathering**

- Sexual history
- Intimate partner violence screening
- STI screening/prevention/treatment
- Fertility planning - plans for pregnancy in the near future?

## **Discussion & Counselling**

- Contraceptive options
- Efficacy of options
- Typical failure rates
- Importance of adherence
- Side effects of various methods

Reversible  
Contraception

Non-Hormonal

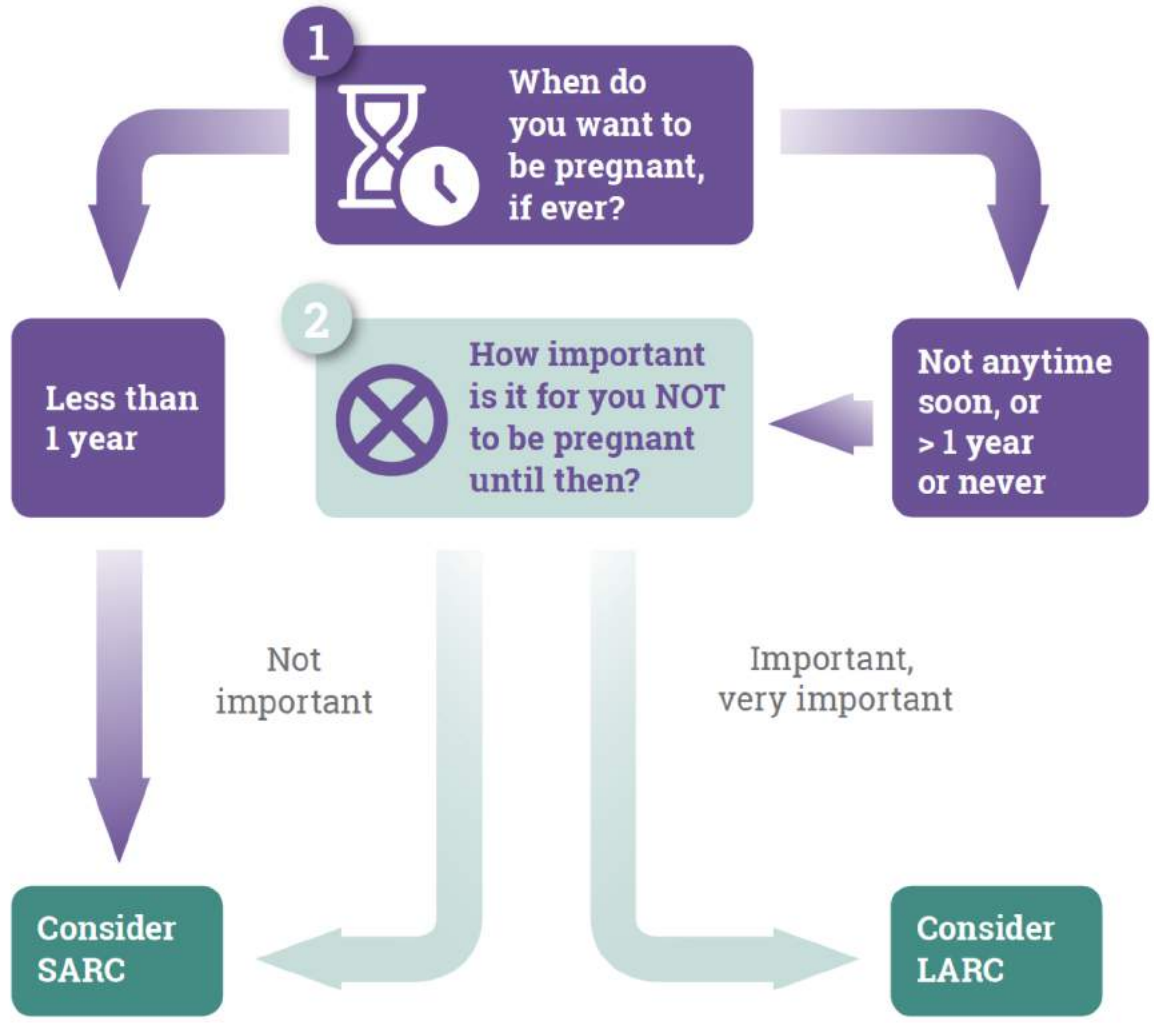
Hormonal

Barrier Methods

LARC

SARC

LARC



SARC: short acting reversible contraceptive

LARC: long acting reversible contraceptive

# SARC – Short Acting Reversible Contraception

- Progesterone only contraceptives
  - Oral pills
  - Injectable (DMPA)
- Combined estrogen & progesterone contraceptives
  - Oral pills
  - Transdermal patch
  - Vaginal ring

# DMPA – Depo Provera



- Consider in women for whom estrogen is contraindicated
  - Recently postpartum
  - Breastfeeding
  - Smokers > 35 years old
- Typical use failure rate: 6%
- Also approved for treatment of endometriosis
- Unique risks/side effects:
  - Delayed return to fertility – up to 1 year
  - Reduction in bone mineral density
  - Increased risk of stroke among women with high blood pressure
  - Menstrual cycle disturbance
  - Weight gain



# DMPA – Practical Tips

- Higher risk of ectopic pregnancy if pregnancy occurs → always rule out ectopic!
- Can initiate at any point in menstrual cycle
  - If started within first 5 days of menstrual cycle, contraceptive effect achieved within 24 hours
- Late injection:
  - First rule out pregnancy!
  - No unprotected intercourse in past 14 days → DMPA injection & back up contraception x 7 days
  - Unprotected intercourse in past 14 days → DMPA injection & back up contraception x 7 days
    - Repeat pregnancy test in 3-4 weeks
  - Unprotected intercourse in past 5 days → DMPA injection & emergency contraception & back up contraception x 7 days
    - Repeat pregnancy test in 3-4 weeks

**DISCONTINUED UNTIL  
2022!!!**

# Progesterone-only Contraceptive Contraindications

- Past history or current diagnosis of breast cancer
- Unexplained vaginal bleeding
- Severe decompensated cirrhosis
- Benign hepatocellular adenoma or malignant hepatoma

# Combined OCP

- Typical use failure rate 9%
  - Higher in obese women
- Long list of contraindications
- Long list of non-contraceptive benefits
- Unique risks/side effects:
  - **VTE**
  - Gallbladder disease

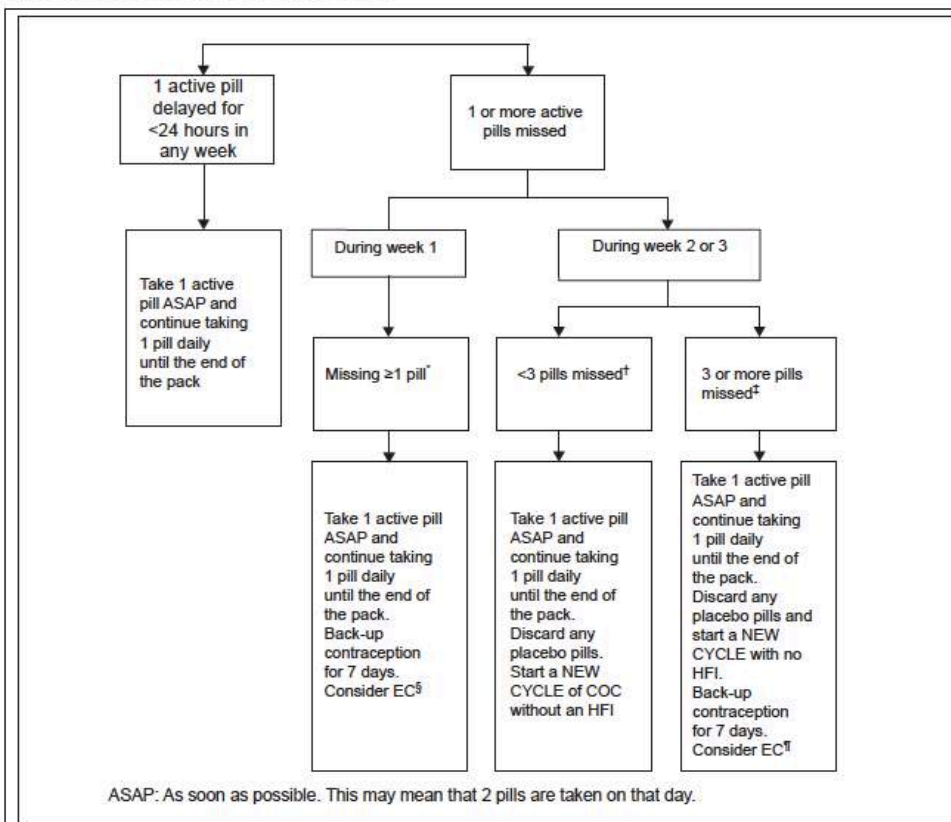
## Contraindications:

- < 6 weeks postpartum
- Smoker > 35 years old
- Hypertension
- Vascular disease
- Current/history DVT/PE
- SLE with positive APLA
- Migraine with aura
- Symptomatic gallbladder disease
- Diabetes with nephropathy/retinopathy/neuropathy
- Rifampicin/rifabutin therapy
- ... and more!

# Combined OCP – Practical Tips

- Back up contraception or abstinence should be used for first 7 days of OCP use
- Can start at any point in menstrual cycle
- **ONLY** examination required prior to starting OCP: **BLOOD PRESSURE!**
- New/irregular breakthrough bleeding in long-term OCP users → think chlamydia
  - 30% will have positive chlamydia test

Figure 1. Missed combined oral contraceptives.



\*During the first week of use (week 1), delay in taking 1 pill  $\geq 24$  hours (i.e., missing one or more pills) increases the HFI and may allow ovulation during this week. Missing 1 active pill before ovulation is effectively inhibited (achieved after taking 1 active pill daily  $\times 7$  consecutive days) may also allow ovulation during this week. If intercourse occurred during the day of pill omission or in the 5 days prior, consider EC.

†Missing fewer than 3 pills in a row during week 2 or 3 is the same as having a short HFI after achieving effective inhibition of ovulation during the preceding week (1 pill daily  $\times 7$  consecutive days). Therefore, efficacy is not expected to be reduced, although breakthrough bleeding may occur. Eliminating the HFI may reduce the risk of unintended pregnancy when pills are missed in week 3. Eliminating the HFI when pills are missed in week 2 is proposed to simplify this algorithm.

‡Missing 3 or more pills in a row during week 3 is likely to impair contraceptive effectiveness because the HFI comes immediately after week 3. Eliminating the HFI and using a back-up method until 7 consecutive days of pills are taken should reduce the risk of unintended pregnancy. EC can be considered if unprotected intercourse has occurred during the interval of missed pills up until 7 consecutive pills have been taken. The same recommendation is proposed for week 2 to simplify the algorithm.

<sup>§</sup>If unprotected intercourse within the last 5 days.

<sup>¶</sup>If repeated or prolonged omission.

# LARC – Long Acting Reversible Contraception

## Intrauterine device

- Progesterone containing
  - Mirena IUD
  - Kyleena KUD
- Copper

## Implantable device

- Etonorgestrel implant (Nexplanon)

## Benefits of LARC:

- Long acting “one and done” approach
- Highly effective
- Coitally independent
- Can be used in pre/perimenopausal women of any age

## Drawbacks of LARC:

- Requires procedural insertion

# IUD - Copper



- Indications:
  - Any woman seeking effective, reversible, coitally independent method of contraception
  - Can be used for emergency contraception
- May be associated with slight increase in dysmenorrhea/menorrhagia
- Unique risks/side effects:
  - Actinomyces on Pap – seen in 20%
    - Leave IUD in place and manage expectantly if asymptomatic
    - Treat with antibiotics if symptomatic

# IUD - Levonorgestrel



- Indications:
  - Any woman seeking effective, reversible, coitally independent method of contraception
- Effective treatment of:
  - Heavy menstrual bleeding
  - Dysmenorrhea
  - Atypical endometrial hyperplasia
- Unique risks/side effects
  - Amenorrhea rates: 44% at 6 months
  - Increased risks of ovarian cysts



# IUD Contraindications

- Pregnancy
- Current PID
- Known distorted uterine cavity

# IUD – Insertion & Removal Tips

## Insertion

- NSAID 30-60 minutes prior to insertion
- Bimanual examination – determine uterine position!
- Sound BEFORE opening IUD package
- Single tooth tenaculum on anterior lip of cervix to gently straighten
- If unsuccessful → consider repeat attempt when woman on menstrual cycle

## Removal

- Visible strings:
  - Don't be afraid to pull firmly if resistance
- No visible strings:
  - Cytobrush – twirl!
  - Cotton swab – twirl!
  - IUD hook...
- No visible strings & no success: US

# New Player: Nexplanon



- <http://www.nexplanonvideos.com>
- <https://www.etonogestrel-implant-training.ca>
- Implantable progesterone-secreting LARC
- Contraceptive effect x 3 years

**NOT** currently funded in Canada by OHIP  
or NHIB

# Emergency Contraception

- **Methods:**
  - Levonorgestrel EC (Plan B)
    - Available OTC
    - Use up to 72 hours post unprotected intercourse
  - Yuzpe regimen – combined OCP
    - Alesse 5 tablets po q12h x 2 doses
  - Post-coital insertion of copper IUD
    - Can place up to 7 days post unprotected intercourse
    - Require negative pregnancy test **FIRST**
- **Tips:**
  - Women with contraindications to regular use of hormonal contraception **can** use hormonal EC
  - Pregnancy test 21-28 days following EC

# Resources

- For patients:
  - Itsaplan.ca (SOGC patient directed)
  - Sexandu.ca/SOS
- For health care providers:
  - SOGC Compassionate Contraceptive Assistance Program (CCAP)
    - <https://compassion.sogc.org/>





QUESTIONS?