Contraception: Making the Right Choice

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Objectives

- Review various forms of hormonal and non-hormonal contraceptives available in Canada
- Considerations for prescribing and managing contraceptive care during the current pandemic
- Answer common questions regarding contraception prescribing

Providing Contraception During a Pandemic
SOGC April 2020

- Need for contraception increases during periods of social disruption, including pandemics
- Pandemics increase social isolation, increasing rates of IPV, reproductive coercion and unwanted or unplanned intercourse
- Healthcare workers can provide virtual care to initiate, improve, and continue contraceptive methods

Black A, Costescu D, Guilbert E, Dunn S, Norman WV, Trouton K, Todd N, Wagner MS, Waddington A, Matei A, Fisher W. Contraception consensus: updated guidance during pandemics and periods of social disruption.

Choosing the Right Contraceptive

1. Combined Hormonal Contraceptives
   - OCP
   - Patch
   - NuvaRing
2. Progestin-Only Contraceptives
   - Depo-Provera
   - Progesterone Only Pill
3. Long-Acting Reversible Contraceptives
   - Hormonal IUD
   - Nexplanon
4. Non-Hormonal Contraception
   - Copper IUD
   - Tubal ligation and salpingectomy

Combined Hormonal Contraception (CHC)

Oral Contraceptive Pill

- Most common!

PROS	CONS
Many benefits in addition to contraception	Risk of breakthrough bleeding with prolonged/continuous use
Comes in various formulations/dosages	Many contraindications
Can be used cyclically or continuously	
Reduces risk of endometrial, ovarian and colon cancer	

- Age ≥35 years and smoking ≥15 cigarettes per day
- Multiple risk factors for arterial cardiovascular disease Hypertension (systolic ≥160 mmHg or diastolic ≥100 mmHg)
- Venous thromboembolism
- Known ischemic heart disease
- History of stroke
- Complicated valvular heart disease (pulmonary hypertension, risk for atrial fibrillation, history of subacute bacterial endocarditis)
- Current breast cancer
- Severe (decompensated) cirrhosis
- Hepatocellular adenoma or malignant hepatoma
- Migraine with aura
- Diabetes mellitus of >20 years duration or with nephropathy, retinopathy, or neuropathy

Combined Hormonal Contraception (CHC)

Oral Contraceptive Pill

Original Product	Generic or Equivalent	Estrogen	Progestin
		Ethinyl estradiol	**Cyproterone**
Diane-35	Cleo-35, Cyestra-35,	35 mcg	2 mg
		Ethinyl estradiol	**Desogestrel**
Marvelon	Apri, Freya, Mirvala, Reclipsen	30 mcg	150 mcg
		Ethinyl estradiol	**Drospirenone**
Yaz	Mya	20 mcg	3 mg
Yasmin	Zamine, Zarah	30 mcg	3 mg
		Ethinyl estradiol	**Levonorgestrel**
Alesse	Alysena, Aviane, Esme, Lutera	20 mcg	100 mcg
Min-Ovral	Ovima, Portia	30 mcg	150 mcg
		Ethinyl estradiol	**Norethindrone**
Lolo		10 mcg	1 mg
Minestrin		20 mcg	1 mg

Choose option with <u>LOWER</u> estrogen dose if sx of:
- Nausea
- Headache
- Breast tenderness
- Bloating

Choose option with <u>HIGHER</u> estrogen and/or longer acting prog if:
- Breakthrough bleeding

Combined Hormonal Contraception (CHC)

Oral Contraceptive Pill

- Can be prescribed continuously to suppress menstruation

Combined Hormonal Contraception (CHC)

Oral Contraceptive Pill

- Options for management of breakthrough bleeding
  - "Double-up pill" from spare pack on any day with breakthrough bleeding until it resolves
  - Take 3-5 day break from hormonal pills and then start new package
  - Switch to a formulation containing levonorgestrel (Minovral®) or other longer acting progesterone
  - Short course of oral estrogen (eg. 2mg PO estrace x 7 days)
  - Switch to transdermal patch

Combined Hormonal Contraception (CHC)

Oral Contraceptive Pill – PANDEMIC CONSIDERATIONS

- Reasonable to start OCP without a BP assessment in patients who are low risk for CV disease and without other CI
  - Attempt to obtain BP measurement within 3 months of starting
- Re-prescription can be performed by virtual visit or pharmacy refill without BP assessment

Combined Hormonal Contraception (CHC)

Contraceptive Patch

- Evra® Transdermal Patch (equiv. 35mcg EE daily)
- Change weekly for 3 weeks, then 1 week off

PROS	CONS
Can be placed anywhere on body (other than breasts), no problem with exercise, swimming	If weight >90Kg, less effective & increased risk of venous thromboembolism
Less breakthrough bleeding than OCP	Same contraindications as OCP
Can be used cyclically or continuously for 9-12 weeks	Occasionally causes skin irritation
Easier to remember than daily pill	Only comes in one colour

Combined Hormonal Contraception (CHC)

Contraceptive Ring

- NuvaRing® (equiv. 15mcg EE daily)
- 3 weeks continuous use, 1 week off

PROS	CONS
Easier to remember than daily pill	5 to 13% of patients may experience vaginitis
Can be removed for up to 4 hours (eg. during intercourse)	Some patients not comfortable inserted ring into vagina
Shorter duration of bleeding compared to patch or pill	Same contraindications as OCP
Less breakthrough bleeding than pill, equivalent to patch	

Combined Hormonal Contraception (CHC)

Contraceptive Patch/Ring – PANDEMIC CONSIDERATIONS

- Both can be used beyond approved duration of use *off-label*
  - Patch can be changed every 9 days instead of 7
  - Ring can be used up to 28 days instead of 21
- **HFI should not exceed 7 days***

Progestin Only Contraceptives

- **Depo-Provera**
  - 150mg IM injection given q90days

PROS	CONS
Long-acting, reversible, discreet	Delayed resumption of ovulation after discontinuing (6-10 months)
May be used in patients with contraindications to estrogen, or who are breastfeeding	Needs to be administered by HCP
Some users may gain weight (risk higher in adolescents)	Transient, reversible decrease in BMD (no difference between adults/adolescents, no increase in risk of osteoporosis or fractures)
Minimal interactions with other medications	

Progestin Only Contraceptives

- **Progestin-Only Pill (POP)**
  - 0.35mg norethindrone PO OD x 28 days (Micronor, Movisse)

PROS	CONS
May be used in patients with contraindications to estrogen, or who are breastfeeding	Must be taken at the same time every day (within 3 hours)
May be used in patients >50 years old	Irregular bleeding is common
No increased rates of weight gain	
No pill-free interval, no monthly bleeding	

Progestin Only Contraceptives

- **Progestin-Only Options – PANDEMIC CONSIDERATIONS**
  - Virtual visit can be used to initiate DMPA/POP
  - Can be re-prescribed without physical exam
  - Both DMPA and POP can be started at any point in the cycle
    - use backup x 7 days after starting DMPA and 48h after starting POP
  - DMPA can be given every 14 weeks (instead of 12-13 weeks)

Long-Acting Reversible Contraceptives (LARC)

- **Hormonal IUDs**
  - Mirena® (52mg levonorgestrel), Kyleena® (19.5mg levonorgestrel)
  - Mirena application 4.4mm diameter, Kyleena 3.8mm diameter
  - Both remain in place for up to 5 years

PROS	CONS
Long-acting, reversible, highly effective	Must be placed by a healthcare provider
May be used in patients with contraindications to estrogen, or who are breastfeeding	Initial cost is high, not covered by OHIP for those >25yo
Highly effective to treat heavy menstrual bleeding	Some women may experience infection, expulsion, perforation or malposition
Amenorrhea rate 20% Mirena, 12% Kyleena	Kyleena not as effective for HMB as Mirena

Long-Acting Reversible Contraceptives (LARC)

- **Nexplanon® (Etonogestrol implant)**
  - New kid on the block!
  - Placed under skin of upper arm (non-dominant)
  - Remains in place for up to 3 years

PROS	CONS
Long-acting, reversible, highly effective	Must be placed and removed by a HCP
May be used in women with contraindications to estrogen, or who are breastfeeding	Initial cost is high, not covered by OHIP for those >25yo
No pelvic exam necessary for placement	20% of women have irregular/prolonged bleeding
Radiopaque	

Long-Acting Reversible Contraceptives (LARC)

- **LARC – PANDEMIC CONSIDERATIONS**
  - Routine appointments for replacements/removals can be delayed
  - Insertion appointments should be prioritized
  - Mirena® can be used for up to 7 years in women ≥25 yo at insertion
  - Limited evidence for extended use of Kyleena®
  - Nexplanon® is effective for 4-5 years after insertion

Non-Hormonal Contraception

- **Copper IUD**
  - 300 or 380 mg/mm^2
  - can also be used for emergency contraception

PROS	CONS
Long-acting, reversible, highly effective	Must be placed by a healthcare provider
May be used in patients with contraindications to estrogen or progesterone, or who are breastfeeding	Heavy bleeding and dysmenorrhea can occur with copper IUD
Less expensive than hormone-containing IUD	Some patients may experience infection, expulsion, perforation or malposition
Can remain in place up to 10 years	

Non-Hormonal Contraception

- **Copper IUD**

TRADE NAME	MANUFACTURER	COPPER (MG/MM2)	LENGTH OF USE	INDICATION/COMMENTS
Flexi-T 300	TriMedic	300	5 years	Uniparous, nulliparous
Flexi-T 300+	TriMedic	300	5 years	Multiparous (≥ 2 deliveries)
Flexi-T 380+	TriMedic	380	5 years	Multiparous. Larger copper surface.
Liberte UT Standard	MediSafe	380	5 years	Uniparous, multiparous or uterine cavity ≥ 7 cm
Liberte UT Short	MediSafe	380	5 years	Nulliparous or uterine cavity < 7 cm
Liberte TT Standard	MediSafe	380	10 years	Uniparous, multiparous or uterine cavity ≥ 7 cm
Liberte TT Short	MediSafe	380	5 years	Nulliparous or uterine cavity < 7 cm
Mona Lisa N	Besins Health Care	300	3 years	Small uterus
Mona Lisa 5	Besins Health Care	380	5 years	Parous women spacing their children
Mona Lisa 5 Mini	Besins Health Care	380	5 years	Nulliparous/parous with narrow or short uterus
Mona Lisa 10	Besins Health Care	380	10 years	Women who do not want further pregnancy
Nova-T	Bayer	200	2.5 years	No product information within monograph

Non-Hormonal Contraception

- **Tubal ligation/salpingectomy**
  - Tubal interruption with clips/sutures vs. salpingectomy

PROS	CONS
Safe, effective, permanent, discreet	Irreversible, risk of regret
Decreased risk of developing ovarian cancer	Surgical procedure requiring general anesthetic
Surgical procedure covered by OHIP	Risks associated with surgery (bleeding, infection, injury to other structures, VTE)
Can usually be performed laparoscopically, or concurrent to cesarean section	Small risk of re-canalization of tubes

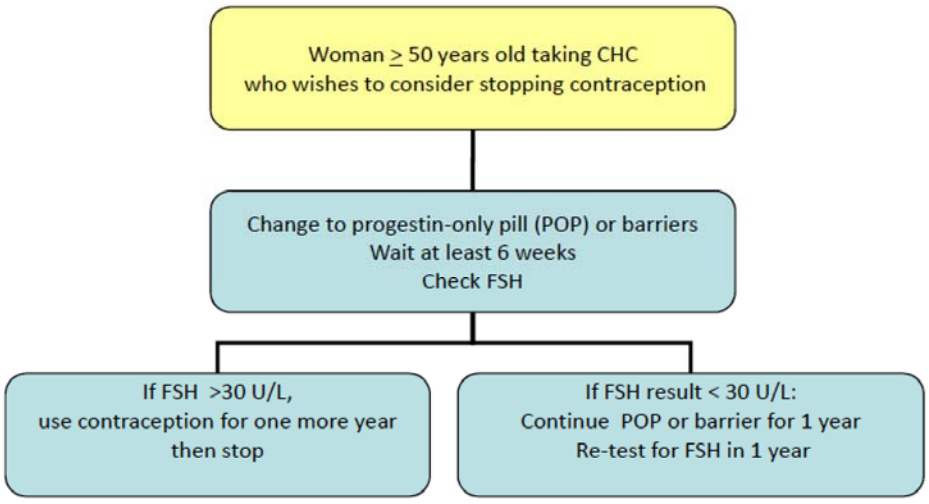
Non-Hormonal Contraception

- **Non-hormonal – PANDEMIC CONSIDERATIONS**
  - Copper IUD
    - IUDs with < 380mm^2 copper should be replaced but those with 380mm^2 can remain in place for up to 12 years
    - POP or OCP can be used with IUD in situ until it can be removed
  - Tubal ligation/salpingectomy
    - Non-urgent surgery may be postponed, women waiting for these procedures should be reminded to use effective, reversible method

Common Questions!

- Best contraceptives for women who are perimenopausal? When to stop OCP?
- Work-up before starting OCP in adolescents with HMB?
- What options are currently available for emergency contraception?

Contraceptive Method	Age 40-50 years	Age > 50 years
Non-hormonal	Stop contraception after 2 years of amenorrhea	Stop contraception after 1 year of amenorrhea
Combined hormonal contraception	Can be continued	Consider switching at age 50 to a non-hormonal method, progestogen-only method, or a LNG-IUS or Cu-IUD
Injectable Progestin	Can be continued	Consider switching at age 50 to alternative methods
Implant	Can be continued to age 50 and beyond	Stop at age 55.
POP		Between 50 and 55 • May check FSH levels • If FSH> 30 IU/L, discontinue after one more year • If FSH in premenopausal range, continue method and check FSH again in 1 year
Levonorgestrel-IUS		A LNG-IUS 52 mg inserted ≥ age 45 can remain until age 55 if used for contraception or HMB



Faculty of Sexual and Reproductive Healthcare Clinical Guidance August 2017. Contraception for women aged over 40 years

Work-up for initiation of OCP in adolescents with HMB

- Most commonly due to anovulation
- CBC, ferritin
- Work-up for bleeding disorders **(20% of cases!)**
  - von Willebrand disease, platelet function defects, thrombocytopenia, and clotting factor deficiencies
- Work-up for endocrinopathy
- Speculum exam NOT necessary
- Pelvic ultrasound of limited utility
- Medical management:
  - LNG-IUD first-line!
  - OCP with 30mcg, NOT low-dose
  - Don't forget oral iron

Emergency Contraception

- LNG-EC pills (Plan B)
  - Patients don't need Rx
  - Most effective if taken within 24h, can be used up to 5 days after unprotected intercourse
  - May not be as effective in people with BMI >25
- Ulipristal Acetate (Ella)
  - Need Rx
  - Can be used up to 5 days after unprotected intercourse
  - Effective in women with BMI >25
- Copper IUD
  - Need Rx
  - Most effective, can be inserted up to 7 days after unprotected intercourse

Questions/Comments?

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