This decision support tool is effective as of February 2014. For more information or to provide feedback on this or any other decision support tool, email certifiedpractice@crnbc.ca

PROGESTIN-ONLY HORMONAL CONTRACEPTIVES (POHCs)

This decision support tool (DST) provides clinical guidance for the provision of progestin-only hormonal contraception. It is meant to be used in concert with the *Contraceptive Management: Assessment DST*

DEFINITION

Contraception that contains only progestin. Three types of POHCs are available in Canada: progestin-only oral contraceptive pills, progestin-only injectable (DMPA) and the levonorgestrel-releasing intrauterine system (Mirena). For the purposes of this decision support tool, POHCs refer only to the first two progestin-only methods of contraception.

INDICATIONS

For the purpose of contraceptive management certified practice, POHCs are indicated for any woman seeking a reliable, reversible, coitally-independent method of contraception. POHCs are a reliable and effective contraceptive option for women unable to use estrogen-containing contraception, such as women over the age of 35 who smoke, have migraine headaches, have hypertension, who are breastfeeding, or who are taking anti-convulsant medication. POHCs are further indicated for a number of menstrual-related problems and the non-contraceptive benefits that they might confer. Clients seeking or using POHCs for a sole purpose other than contraception must be referred to a physician or nurse practitioner for an order or transfer of care.

ACTION

The primary method of action of POHCs is by inhibiting the secretion of pituitary gonadotropins, which then suppresses ovulation. POHCs also make cervical mucus more viscous, which impedes sperm transport. POHCs also induce endometrial atrophy, making the endometrium unreceptive to implantation.

PHARMACOKINETICS

Dose

POHC oral pills are supplied in packages of 28 tablets, each containing 35mcg of norethindrone.

DMPA is supplied in vials of 150mg to be injected intramuscularly every 12 weeks (with a range of 10 to less than 14 weeks being acceptable).

Onset

Contraceptive benefits are realized within seven days of consistent and correct POHC use.

CONSULT OR REFER

RN(C)s* are restricted to dispensing or administering POHCs to women who classify as category 1 or 2 as defined by the *U.S. Medical Eligibility Criteria for Contraceptive Use*. RN(C)s cannot independently dispense or administer POHCs without an order to women who classify as a category 3 or 4 as defined by the *U.S. Medical Eligibility Criteria for Contraceptive Use*.

Relative Contraindications

As per *U.S. Medical Eligibility Criteria for Contraceptive Use*, category 3 (see *Contraceptive Management: Assessment DST*, Appendix 2: Medical Eligibility for Initiating Contraception).

Absolute Contraindications

As per *U.S. Medical Eligibility Criteria for Contraceptive Use*, category 4 (see *Contraceptive Management: Assessment DST*, Appendix 2: Medical Eligibility for Initiating Contraception).

RN(C)s must refer or consult with a physician or nurse practitioner for the following clients:

- Women wanting to use a POHC in the presence of relative or absolute contraindications (*U.S. Medical Eligibility Criteria for Contraceptive Use*, categories 3 and 4).
- Women whose medical condition has changed so that they might be using a POHC in the presence of relative or absolute contraindications (*U.S. Medical Eligibility Criteria for Contraceptive Use*, categories 3 and 4).
- Women who are currently taking POHCs and demonstrate any of the following symptoms: ACHES (abdominal pain, chest pain, headache, eye problems and severe leg pain); jaundice; syncope; severe depression; unexplained vaginal bleeding; severe or worsening migraine headaches (with or without aura) or severe allergic reaction.
- Clients who develop aura associated with headaches (Initiation of POHC = Category 2; Continuation of POHC = Category 3)
- Clients taking medications that might be affected by hormonal contraception

* Note: RN(C) is an authorized title recommended by CRNBC that refers to CRNBC-certified RNs, and is used throughout this Decision Support Tool (DST).

Drug Interactions

The following drugs and drug classes are considered a category 3 or 4 and could have some effect on POHC absorption and metabolism. RN(C)s must refer or consult with a physician or nurse practitioner for clients taking any of the following medications:

Oral

- St. John's Wort (not in US MEC but may decrease efficacy of hormonal contraceptive)
- Anticonvulsants: phenytoin, carbamazepine, barbiturates, primidone, topiramate, oxcarbazepine
- Rifampicin or Rifabutin therapy
- Antiretroviral therapies (see US MEC June 22, 2013 – Update to CDC MEC Revised recommendations for HIV for a special note and specific breakdown about hormonal contraceptives and antiretroviral therapies. RN(C)s in contraceptive management who work closely with clients who take antiretroviral therapies should become familiar with this reference.)

DMPA

- Aminoglutethimide (used to treat Cushing disease)(Not in US MEC but may decrease effectiveness of DMPA)
- Antiretroviral therapies (See US MEC June 22, 2013 – Update to CDC MEC Revised recommendations for HIV for a special note and specific breakdown about hormonal contraceptives and antiretroviral therapies. RN(C)s who work closely with clients who take antiretroviral therapies should become familiar with this reference)

Note: Except for Rifampicin or Rifabutin therapy, antibiotic use does not affect POHC efficacy.

PREGNANCY AND BREASTFEEDING

Pregnancy

There is no known harm to the woman, the course of her pregnancy or the fetus if POHCs are inadvertently used during pregnancy. The relation between DMPA use during pregnancy and its effects on the fetus remain unclear. If a POHC is inadvertently initiated with a pregnant client or the client becomes pregnant during POHC use, the POHC should be discontinued immediately.

Postpartum

Initiation of POHCs can occur directly post-partum regardless of breast feeding status.

Breastfeeding

Progestin is excreted in breastmilk in small quantities, but is unlikely to have an effect on the baby. Breastfeeding is not a contraindication for POHC use.

PRECAUTIONS AND CONSIDERATIONS

Precautions Specific to Progestin-Only Oral Contraception

- There is no increased risk for venous thromboembolism (VTE) with progestin-only products.
- Malabsorption related to chronic gastrointestinal inflammation and active diarrhea might cause ineffectiveness of any oral contraception.
- Repeated vomiting (e.g., bulimia) and or severe, persistent diarrhea can decrease the absorption of the pill and might decrease its effectiveness. Vomiting within two hours of pill ingestion might require repeated doses.

Precautions Specific to DMPA

- Clients unable to tolerate injections might not be good candidates for DMPA.
- DMPA is associated with decreased bone mineral density that is generally temporary and reversible. The advantages of DMPA use generally outweigh theoretical concerns regarding fracture risk. The available evidence does not justify limiting duration of DMPA use due to bone density concerns. Use of DMPA in the absence of symptoms or other risk factors (i.e. strong family history of osteoporosis) is not an indication for bone mineral density testing.
- Clients should be informed about the potential effects of DMPA on bone mineral density and counselled about bone health, including calcium and vitamin D supplements, smoking cessation, weight-bearing exercise, and decreased alcohol and caffeine consumption.
- To rule out a rare but possible severe allergic reaction to DMPA, clinicians should recommend that clients wait 15-20 minutes following injection.
- DMPA might have a slower return to fertility than other hormonal contraceptives. The average return to fertility is 10 months from the last DMPA injection.

ADVERSE EFFECTS

Side effects from POHCs are often mild and transient and respond to a change in formulation. Acknowledgment and management of side effects are crucial to successful continuation of POHCs.

Common Possible Side Effects

Common side effects of POHCs include, but are not limited to:

- Amenorrhea
- Appetite changes (can result in weight gain)
- Breast tenderness
- Breakthrough bleeding
- Headaches (mild, without aura)
- Libido changes
- Mood changes
- Skin changes
- Spotting
- Weight gain (DMPA)

Serious Possible Side Effects

Serious side effects from POHCs are rare. The following should be investigated immediately, referred to a physician or nurse practitioner and might warrant discontinuation of POHCs:

- ACHES
- Severe depression
- Jaundice
- Unexplained vaginal bleeding
- Syncope
- Blood pressure >140/>90
- Severe or worsening migraine headaches with or without aura
- Severe allergic reaction

CLIENT EDUCATION SPECIFIC TO POHC USE

- A missed oral POHC pill by more than three hours from the regular time requires use of back up contraception (e.g., condom) for 48 hours. Clients might consider use of emergency contraception if unprotected intercourse occurred within the past 5-7 days.
    - If available, advise the client to follow the product monograph, or advise the client to contact a health care provider or clinic. Some clinics choose to develop client hand-outs or resources specific to missed or late CHC doses. The Society of Obstetricians and Gynecologists of Canada (SOGC) or the US MEC Selected Practice Recommendations for Hormonal Contraceptive Use (2013) have guidelines for missed hormonal contraceptives that can be used as a resource for health care providers.
- Irregular menses is common within the first several months of POHC use. After 6-12 months, amenorrhea is more likely.
- Weight gain is possible with DMPA use and can be used as a teachable moment.
- Clients using DMPA should be counselled regarding calcium intake and or supplementation and encouraged to quit smoking and perform weight-bearing exercises at least three times a week.
- If it has been 14 weeks or more since the last DMPA injection, a urine pregnancy test should be performed. Use of emergency contraception may be considered if intercourse has occurred within the last 5-7 days. A back up method (e.g., condoms) should be recommended for the next seven days. Depending on the client's risk of pregnancy, a repeat urine pregnancy test may be indicated at two weeks or prior to the next injection.

DISPENSING AND ADMINISTERING

For dispensing POHCs, refer to the *Contraceptive Management: Assessment* DST (pub. 691).

Administering DMPA

Mix the suspension well by shaking the vial before drawing up the medication. Using a 21-23 gauge needle at least one inch in length, administer 1cc of 150mg/mL DMPA via intramuscular injection into

the deltoid or ventrogluteal muscle depending on the client's preference. The ventrogluteal muscle might be less painful for the client. Do not massage the injection site.

MANAGEMENT AND FOLLOW UP

After initiation or change of a POHC, recommend follow up visits between 3 – 6 months and annually thereafter. Blood pressure measurements should be evaluated at initiation and then at least annually thereafter.

For the purpose of this DST, initiation of hormonal contraception is when no hormonal contraception has been used within the last three months or the client is switching from a CHC to a POHC or vice versa.

DOCUMENTATION

- Refer to the *Contraceptive Management: Assessment DST*.

Appendix 1: POHC Screening Tool

Are there any relative or absolute contraindications for Progestin-Only Hormonal Contraceptive Use?

Questions to assist in determining Medical Eligibility for POHC use:

Have you ever been told you have breast cancer?	NO	YES
Have you ever had a stroke or problems with your heart?	NO	YES
Have you ever been told you have liver disease or jaundice?	NO	YES
Have you ever been told you have diabetes?	NO	YES
Have you ever been told you have lupus or rheumatoid arthritis?	NO	YES
Have you ever been told you have high blood pressure?	NO	YES
Do you have problems with severe diarrhea, poor absorption or other bowel disorders?	NO	YES
Do you get migraine headaches?	NO	YES
Do you have any unexplained vaginal bleeding?	NO	YES
Do you take any medications including natural remedies?	NO	YES
Do you take anti-retroviral medications?	NO	YES
Do you take medications for seizures?	NO	YES
Do you take medications for Cushing disease?	NO	YES
Do you take medications for tuberculosis?	NO	YES

IF YES to any:
STOP – EXPLORE OR REFER
Client may not be a good candidate for POHC. Counsel about other contraceptive methods or consult/refer to Dr/NP if client is a MEC

IF YES to any:
STOP – EXPLORE OR REFER
Client may not be a good candidate for POHC. Counsel about other contraceptive methods or consult/refer to Dr/NP if client is a MEC category 3 or 4.

If client answers "NO" to all questions.

PROCEED
Client falls into MEC category 1 or 2

Is clients blood pressure more than 160/100?

Yes → **Consult or refer to MD/NP**

No

Is there a possibility of pregnancy?

Yes → **Pregnancy Test** – urine βHCG

No

Negative
- Consider Emergency Contraception if indicated

Positive
- Client does not require POHC at this time.
- Counsel appropriately

Provide POHC based on client desires, availability, side effects, non-contraceptive benefits, costs and prior client experience

REFERENCES

For help obtaining any of the references on this list, please contact the CRNBC Helen Randal Library at circdesk@crnbc.ca

More recent editions of any of the items in the Reference List may have been published since this DST was published. If you have a newer version, please use it.

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