

## **STANDARD OPERATING PROCEDURE- GUIDELINE**

### **ADMINISTRATION OF DEPOT MEDROXYPROGESTERONE INJECTIONS**

#### **STATEMENT**

This SOP is for management of depot medroxyprogesterone acetate (DMPA, marketed as Depo-Provera) injections. DMPA is a reversible method of contraception that can be used by women of all ages, including adolescents. Though its perfect use failure rate is 0.3% in the first year of use, the typical use failure rate is 3%, and only 23-56% of women continue to use DMPA at one year (1).

DMPA dosing is 150mg IM or 104 mg SC. It functions by ovulation suppression by inhibition of the LH and FSH surge, cervical mucous thickening and the slowing of tubal and endometrial mobility.

#### **ADVANTAGES:**

1. Decreased menstrual blood loss:
  - a. After 1 year of use, 50% of women develop amenorrhea and with continued use, 80% develop amenorrhea after 5 years of use.
  - b. Decreased menstrual cramping and pain
  - c. Improvement in endometriosis
2. Reduced risk of endometrial cancer, possible reduction in ovarian cancer
3. Reduced acute sickle cell crises
4. Possible reduced seizure frequency in women with seizure disorders (2).
5. Appropriate for most women with contraindications to estrogen-containing contraception.

#### **DISADVANTAGES:**

1. Irregular menses common in first few months of use though anemia is highly unlikely
2. Possible side effects such as altered mood, fatigue, anxiety, decreased libido, headaches
3. Slow return to baseline fertility (average approximately 10 months from last injection)
4. Reversible decrease in bone mineral density
5. Significant weight gain may occur in *some* patients as below.

#### **DMPA and weight gain:**

Studies assessing weight gain show great variability in weight gain/loss: -11.3 kg to +31 kg at 12 months (3). The available evidence suggests that weight gain is not universal in all DMPA users, and two studies in particular suggest that women who gain more than 5% of their baseline weight within 6 months of starting DMPA may go on to continue to have significant weight gain (4-5

#### **DMPA INJECTION STANDARD PROCEDURES:**

*This information is a guideline and should not be considered as inclusive of all proper treatments or methods of care or as a statement of the standard of care.*

#### Initial Injection:

- Ensure the provider is reasonably certain that the patient is not pregnant (see box below)
- If initiating at any point in cycle (except within first 7 days of menstrual cycle) advise the patient to use a back-up method for 7 days.
- DMPA can be offered to a patient in whom the provider cannot be reasonably certain patient is not pregnant (see box below), but she should be counseled on the possibility of early pregnancy, and be advised to return for urine pregnancy test in no later than 2 weeks.
- Assessment of baseline weight

#### Follow-up Injections:

- Provide repeat DMPA injections every 13 weeks (3 months).
- Early injections: The repeat DMPA injection can be given early when necessary.
- Late injections: The repeat DMPA injection can be given up to 2 weeks late (15 weeks from the last injection) without requiring additional contraceptive protection (6).
- A pregnancy test is not necessary unless there was a possibility the patient could be pregnant at the time of the last injection (see above).
- Follow up injections can be injection-only visits if the patient is within 15 weeks of the last injection, has no concerns, and is otherwise current in health care maintenance.
- At the 6 month injection visit, weight should be noted and compared to baseline weight. If  $\geq 5\%$  of baseline weight has been gained, patient should be scheduled to see provider to review weight gain with DMPA.
- If patient has concerns about prolonged bleeding, amenorrhea, etc., a visit with a provider can be scheduled to address concerns. Repeat injection should not be delayed.

#### Late Injections:

- The repeat DMPA injection can be given up to 2 weeks late (15 weeks from the last injection) without requiring additional contraceptive protection (6).
- If  $>15$  weeks has passed since the last DMPA injection, the patient should be evaluated by a provider. A DMPA injection can be given if the provider can be reasonably certain the patient is not pregnant (see box below); provide DMPA as for Initial Injection above. Consider using emergency contraception if appropriate.

#### **BOX. How to be reasonably certain that a woman is not pregnant (6)**

A health care provider can be reasonably certain that a woman is not pregnant if she has no symptoms or signs of pregnancy and meets any one of the following criteria:

- is  $\leq 7$  days after the start of normal menses

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- has not had sexual intercourse since the start of last normal menses
- has been correctly and consistently using a reliable method of contraception
- is  $\leq 7$  days after spontaneous or induced abortion
- is within 4 weeks postpartum
- is fully or nearly fully breastfeeding (exclusively breastfeeding or the vast majority  $[\geq 85\%]$  of feeds are breastfeeds), amenorrheic, and  $< 6$  months postpartum

## REFERENCES

1. Hatcher RA, Ziemann M, Allen AZ, Lathrop E, Haddad L. Managing Contraception, 14<sup>th</sup> ed. Tiger, Georgia: Bridging the Gap Foundation, 2017.
2. Davis AR et al. (2014) Contraception for women with epilepsy. In Allen R. A. (Ed.) *Contraception for the Medically Challenging Patient*. (pp. 142-3). New York, NY: Springer.
3. Risser WL et al. Weight change in adolescents who used hormonal contraception. *J Adolescent Health*. 1999. 24(6): 433-6.
4. Bonny AE et al. A longitudinal comparison of body composition change in adolescent girls receiving hormonal contraception. *J Adolesc Health*. 2009; 45(4):423-5.
5. Le, Y et al. Early weight gain predicting later weight gain in medroxyprogesterone acetate users. *Obstet Gynecol*. 2009;114(2 Pt 1):279-84.
6. Curtis KM, Jatlaoui TC, Tepper NK, et al. U.S. Selected Practice Recommendations for Contraceptive Use, 2016. *MMWR Recomm Rep* 2016;65 (RR-4):1-66.

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## APPROVALS:

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