Menstrual Suppression Guidelines

Overview
Contraceptive hormones that block ovulation can also be used to suppress bleeding. DMPA with long-term use will result in amenorrhea in 90% of women by 2 years of use but during the first year only 50% have amenorrhea and women can have very heavy irregular bleeding. When women on DMPA are finally amenorrheric it is because of hypoestrogenism. Ovarian suppression without exogenous estrogen results in a low estrogen state consequently these women get amenorrhea but also have a loss of bone density. For this reason, if a woman is specifically requesting menstrual suppression the use of a combination product may be prudent, if estrogen can be used.

For skipping a single period, any OCP can be used simply by skipping the period week pills and going directly to another pill package, so a total of 6 weeks of the hormonal pills are taken followed by the usual pill free or period week. Advise women that spotting might happen but typically it is light and painless and it is important to keep taking the pill to maintain contraceptive efficacy. Multi-phasic pills are more likely to trigger bleeding and it is possible taking the second package backwards to create at least 2 weeks of the same dose pill might help although it is not proven. It might be best to advise women wishing to skip just one period to use a monophasic pill but if this is not practical even a multiphasic pill will work most times.

For extended cycles (skipping some periods), a monophasic 30 mcg EE<sub>2</sub> and norgestrel pill has been shown to be effective for skipping every other month period (42/7 cycle). Seasonale is a brand name for a pill (30 mcg EE<sub>2</sub> and 150 mcg Lng) taken for 84/7 days with a 7 day period or a 91 day cycle. There was a lot of irregular bleeding (not just spotting) even at the end of the year and a pulmonary embolus reported in 1 of the approximately 450 users. For this reason, women seriously interested in decreased periods should be encouraged to consider continuous use of lower estrogen dose pills instead of longer cycles for both safety (decreased dose exposure) and less irregular bleeding.

For continuous active pill use, a monophasic 20 mcg EE<sub>2</sub> and 100 mcg levonorgestrel pill, has been shown to be effective with 80% of women by 6 months only having rare bleeding. During the first 6 months irregular bleeding is very common and worse than with cyclic use. Missed or late pills can trigger the bleeding. If still bleeding at 3-6 months, consider a switch to NETA progestin pill but with only 20 mg EE<sub>2</sub> dose, without a period week.

Skipping the pill free week results in 7 more days each cycle of hormone pills and no week to allow the pill hormones to drop to zero. This prevents hormone withdrawal symptoms like bleeding, headaches, and mood changes. But it is also likely that there can be a small net increase in overall hormone exposure. A single study of only 30 women suggested the SHBG and HDL levels were slightly higher in women with extended 42 day cycles using a 30 mcg EE<sub>2</sub> pill. For this reason, extended cycles should be restricted to 30 mcg or less EE<sub>2</sub> dose and continuous or daily use to 20 mcg EE<sub>2</sub> formulations.
The patch delivers an estrogen dose equivalent to an oral 30-35 mcg EE$_2$ pill and should not be used until studied closely for daily use or no periods. It could possibly result in hyperplasia or excess estrogen effects. Phasic formulations increase the risk of irregular bleeding and are not appropriate for extended or continuous use. All sub 50 mcg extended OCP cycle literature has been with gonane type progestin products and it is probable that for good endometrial stability a long half-life gonane type progestin is effective. However, norethindrone 20 mcg EE$_2$ products have a high rate of missed or silent menses with cyclic use and appears to work well especially in older women with less ovarian activity and perhaps the weaker progestin triggers less bleeding. Do not use desogestrel progestin products for continuous use, this progestin doubles the risk of blood clots in cyclic users and it is possible if this would increase with daily use (American Journal Obstet Gynecol 2004; 190:332-7).

Although, the CVR (vaginal ring) does contain a metabolite of this desogestrel progestin, the ethinyl estradiol serum levels are so low with the CVR it is likely the estrogen exposure would be lower than with 20 mcg oral pill use. Extended or continuous CVR use can suppress withdrawal bleeding. The levels of hormones released by the CVR stay high enough to block ovulation for up to 5 weeks (35 days) of use, but it is best to go no longer than 1 month of use per ring. Insert a new ring on a set day like the 1$^{st}$ of each month to take out old ring and insert a new ring. If the woman notices a lot of spotting at the end of each month, changing to a new ring sooner (by 4 weeks) may help. It is likely just as with continuous pill use irregular bleeding will be common in the first 6 months and it should decrease although there are no published studies.

For women wanting to do menstrual suppression or skip periods on the OCP or the CVR the following should be done:

1. Counsel and document the reason the woman is choosing this schedule (i.e. withdrawal symptoms, headaches, wants no period, wants better OC efficacy, etc.) and that she is aware this is not FDA approved. Long term studies have not been done but it is unlikely there would be any additional risk especially if doses used are less than cyclic OCs (cyclic 30 mcg EE$_2$ pills actually deliver more estrogen than daily 20 mcg EE$_2$ pills). Remember to discuss alternative choices like LngIUS or DMPA although the LngIUS does not suppress ovulation in at least half of women and DMPA can result in hypoestrogenism.

2. Write prescription for hormone pills only, skip spacer pills, #84 with 4 refills for 1 year. Give her a menstrual diary to record all bleeding and counsel carefully to expect irregular bleeding (can be 3 weeks of daily bleeding of 1 to 2 pads) and the relationship to pill taking compliance.

3. A year of continuous OCP prescription requires 18 pill packages. A year of extended or 42 day cycles requires 15 pill packages. It is best to only dispense 3 to 4 months prescription until well established use. Keep a menstrual calendar of the daily bleeding, spotting, and hopefully absence of bleeding or symptoms. Use
of a calendar is very helpful to track progress and if interventions are done then it can easily be seen if something worked.

4. The woman should be strongly counseled that irregular bleeding is common and to be expected in the first 6 months. Schedule a visit in 2-3 months to review the menstrual calendar and symptoms.

5. If at 6 months persistent irregular bleeding consider pregnancy testing, infection testing, thyroid testing, or referral for an ultrasound to rule out fibroids, and consult as needed.

6. Use of NSAIDS like naprosyn 440mg twice a day for 5 days, taking the pill twice a day for 3 days, or 14 days of twice a day doxycyline 100mg are all possible interventions to stop spotting but basically the longer a woman takes one pill daily the greater the amenorrhea rates and more stable the endometrium. Only do one intervention at a time to better assess response and to allow more time.

7. Offer HCG testing when amenorrhea if missed pills or concerns and prudent to do HCG testing at first revisit.

8. Continuous use of the OC will suppress ovulation and ovarian follicles and there may even be a robust return in ovarian activity when OC use is stopped. Advise women that when stopping continuous use it is very possible ovulation may happen prior to bleeding because of the long-term suppression and atrophy of the endometrium. Stopping the continuous OC just to find out when bleeding returns may take a month and could risk pregnancy. If a woman is stopping to get pregnant it is prudent to advise prenatal vitamins with folic acid and to wait for conception until at least one regular cycle has regenerated the endometrium. However if she were to get pregnant on the OC or immediately after stopping the OC this is not an indication for termination and many women have very normal pregnancies which were conceived while using a hormonal method.

9. After 2 years of no bleeding, screen for polycythemia or hemochromatosis (a rare genetic disease causing excess iron absorption) by checking hemoglobin. If hemoglobin level is 15 or greater, check a complete blood count, a fasting ferritin and transferrin saturation and if abnormal (ferritin >300ng/ml or transferrin saturation >45%) consider referral to confirm diagnosis. The treatment for hemochromatosis is to avoid iron excess, which can lead to damaged organs (liver, brain) and while a woman could still choose menstrual suppression, she would need hematocrit monitoring and probable phlebotomy or blood donation once or twice a year. Polycythemia is another rare condition that could be worsened with amenorrhea, it is an excess red cell mass, this can increase blood viscosity and the risk for thrombosis. Usually this happens because of renal or pulmonary disease or rarely a genetic condition (polycythemia vera) with abnormal myeloproliferation.