Hormonal Intervention for the Prevention of Chupat Niddah

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Introduction

Chupat niddah, a wedding that occurs while the bride is a niddah, is a situation that couples generally wish to avoid due to its impact on the beginning of married life. First, chupat niddah requires minor changes in the ceremony that may reveal the couple's status to careful observers. More importantly, however, physical contact is forbidden, and the couple is prohibited from being alone unchaperoned for as long as the wife remains a niddah. While Rambam (Hilchot Ishut 10:6) goes so far as to indicate that a chupat niddah invalidates the wedding, this is not the accepted opinion in Halachah (Shulchan Aruch, Even HaEzer 61:2). Traditionally, chupat niddah was avoided by scheduling the wedding at the appropriate time in a woman's cycle.

Medical advances of the past few decades offer the ability to use hormonal medication to prevent *chupat niddah*. There are times when such intervention is clearly needed, such as when the pre-selected wedding date falls at a time when the bride is likely to be a *niddah* or when the wedding must take place during a specific time such as school vacation. Many brides, however, have begun to believe that all women use such intervention. This is based on a prevalent belief that stress can lead to changes in the cycle and therefore hormones should be used "just in case." This is a problematic situation as intervention may, at times, not be needed, and the decision to intervene hormonally needs careful bal-

While efforts are made to keep this as private as possible—with only a minimum of people knowing—it can still be embarrassing to the bride and groom.

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ancing of risks and benefits. The goal of this paper is to review what intervention is possible and the potential side effects so that an informed decision can be made in each case.

Medical Background

Menstruation results from an orderly buildup of the uterine lining orchestrated by a combination of hormones from the pituitary gland in the brain and the ovaries. At the beginning of the menstrual cycle, the pituitary secretes RSH (follicle stimulating hormone), which in turn stimulates the ovaries to select and grow a follicle, which contains an ovum (egg). Estrogen produced by the growing follicle signals the lining of the uterus to start developing in preparation for possible implantation later in the cycle. Around the mid-cycle (typically day 14 in a classic 28-day cycle), the pituitary sends out an LH (luteinizing hormone) surge, which both matures the egg for fertilization and triggers the release of the egg from the ovary in a process called ovulation. The egg is then swept up by the fallopian tubes, where fertilization occurs if viable sperm is present. The egg (or, if fertilized, the embryo) makes its way to the uterus over the course of 3–5 days. In the meantime, the follicle (now known as the corpus luteum or yellow body) switches from estrogen to progesterone production. This supports the uterine lining by increasing special blood vessels in the uterus called spiral arteries. In the absence of implantation, the corpus luteum will stop producing progesterone and the uterine lining will break down. The subsequent shedding is known as menstruation.

Exogenous (external, generally artificially produced) hormones can be used to alter the natural cycle in predictable ways, making them a useful tool in preventing a *chupat niddah*. There are two categories of hormonal formations available on the market for this purpose: 1) progesterone-only, and 2) a combination of estrogen and progesterone. There are advantages and disadvantages to each type as will be described in the coming sections.

Progestins

Artificial progesterones are known as progestins. Initiating a progestin in the second half of the menstrual cycle prolongs the progesterone support of the uterine lining and prevents shedding. The most commonly used progestin for this indication is known as norethindrone or nore-thisterone acetate (common brand names are Primolut N and Aygestin). This same formulation is used at a much lower dose and in a different manner as contraception in the "mini-pill," a form of hormonal birth

control used when one wants to avoid estrogen use. There is a second class of progestin which includes medroxyprogesterone acetate (Provera or Aragest) which is also used, but less commonly for cycle regulation. Additional progestins exist but are generally not used for preventing chupat niddah.

While progestins have been known for over half a century² to have the effect of delaying menstruation, there is only limited medical literature documenting the appropriate dosage and timing. One common approach is to start 5–7 days before the expected date of the next menses and continue for as long as one desires to delay the menses.³ Longer continuous use increases the chance of breakthrough bleeding. Thus, when used for the purpose of preventing chupat niddah, it is probably best to use only for short time periods (approximately 10 days at a time).

In the case of a bride with a predictable cycle whose wedding may fall out close to her expected period, she can start one of the medications a week or so prior to the expected period and continue until after the first episode of marital relations. At that point, she can stop the medication and within 2-4 days, she will experience a "withdrawal bleed," shedding of the uterine lining with the loss of progesterone similar to that which occurs in a natural cycle. This method is most useful if the cycle needs to be delayed by less than a week. Longer delay is possible with this method but may be susceptible to breakthrough bleeding. If a longer delay is necessary, it can be accomplished by gradually delaying the onset of bleeding over the course of several cycles rather than just the cycle immediately prior to the wedding.4

Progesterone-only methods are usually well tolerated but may have some side effects such as drowsiness, bloating, and constipation. These are typically minor and will resolve themselves once the medication is stopped. Occasionally, the withdrawal bleed following the use of these medications may be heavier than a typical period. The bride's cycle will generally resume as normal from the date of her withdrawal bleed (i.e., if

however, that the dosage and dosing described is not the only possible approach.

RB Greenblatt, EC Jungck, "Delay of menstruation with norethindrone, an orally given progestational compound," JAMA, 1958; 166(12): 1461–1463.

CE Williams, SM Creighton, "Menstrual disorders in adolescents: review of current practice." Horm Res Paediatr 2012; 78(3):135-143.

A case series related to successful use of norethindrone to prevent *chupat niddah* is published on yutorah.org (see <download.yutorah.org/2009/1053/733773.pdf>). It should be noted,

she has 28-day cycles, she can expect her next period 28 days from the onset of the withdrawal bleeding).

It should be noted that many progesterone-only medications are used as a form of contraception. This entails, however, a different dosage and administration schedule. Thus the use of progestins for delaying menses as we describe here would not be an adequate form of contraception and should not be viewed as such.

Estrogen and Progesterone Combination Methods

The combination of exogenous estrogen and progesterone has been utilized as an effective form of birth control for over half a century. At first it was available only in pill form as the oral contraceptive pill (OCP); this form continues to be widely used.⁵ Estrogen and progesterone combination methods, however, are now produced in other forms such as patches and vaginal rings.

The steady level of estrogen and progesterone suppresses the pituitary, preventing the initiation of the menstrual cycle, and thus ovulation and pregnancy. The estrogen stimulates a mild thickening of the uterine lining and when the active form of the method is stopped, either at the end of the active pills or when the patch/ring is removed, the drop in hormone levels causes a withdrawal bleed.⁵

Different combinations of hormonal contraceptives vary by the type of estrogen and progesterone, and by the quantity of each. Combination pills are generally categorized by the amount of estrogen they contain. Those containing 10–15 mcg (such as Lo-Loestrin, Lo-Minastrin, Minesse) are known as very low dose; 20 mcg (Loestrin, Minastrin, Junel, Yaz, Feminet, Harmonet, Mercilon) as low dose; and 30 mcg (Apri, LoOvral, Gynera, Microdiol, Microgynon, Minulet, Nodette, Yasmin) as medium dose. Some formulations have higher levels (Ortho-Cyclen, Ortho-Novum, Sprintec all have 35 mcg), but older formulations with high doses of estrogen (50 mcg) are no longer recommended.

The risks associated with combination methods (see below) are often attributed to the dose of estrogen. Therefore, physicians may prefer to prescribe lower estrogen formulations. The higher the estrogen dose, however, the less likely the woman will experience breakthrough bleeding. When attempting to prevent a *chupat niddah*, a formulation with medium dose is typically preferable. Most physicians would have few safety

⁵ R Sitruk-Ware, A Nath, and DR Mishell Jr, "Contraception technology: past, present and future," *Contraception*, 2013; 87: 319–330.

concerns for young, otherwise healthy, women, especially in the short term.

As the combination pills completely override the natural cycle, one can completely change the time that a woman will become a *niddah*. One way to use this to prevent *chupat niddah* is for a woman to remain on this pill until after *be'ilat mitzvah*. She then stops taking the pill and has a withdrawal bleed within 2–4 days. If the pill is started a few months prior to the wedding, this can also be used to change the time that she expects her period.

Considerations in the Decision to Medically Intervene to Prevent *Chupat Niddah*

When the wedding date has already been set, or a woman's cycle has changed and she will clearly have a *chupat niddah*, there is little debate about the use of hormones for cycle manipulation unless there are clear medical contraindications. However, when deciding about the prophylactic use of hormones for women with regular cycles or planning the wedding date without taking the natural cycle into account, one should take the following into consideration.

1. Risk of hormonal intervention

An underlying medical principle is "primum non nocere," first do no harm. In the use of any medication, there is always the possibility of unwanted side effects that must be considered. Women on hormonal contraception are at risk for several severe, albeit rare, complications such as stroke⁶ and venous thrombosis (which can lead to pulmonary embolism).⁷ Women with events in their past medical history such as mi-

The absolute risk of ischemic stroke among young women who do not use HC is 2.5/100,000 per year, whereas for young women who use HC the risk is 6.3/100,000.

S Sacco, GS Merki-Feld, KL Ægidius, et al., "Hormonal contraceptives and risk of ischemic stroke in women with migraine: a consensus statement from the European Headache Federation (EHF) and the European Society of Contraception and Reproductive Health (ESC)," *J Headache Pain*, 2017; 18:108.

The overall absolute risk of venous thrombosis per 10,000 woman years in non-users of oral contraceptives was 3.01 and in current users was 6.29.
Ø Lidegaard, E Løkkegaard, AL Svendsen, C Agger, "Hormonal contraception and risk of venous thromboembolism: national follow-up study," BMJ. 2009;339:b2890.

graines⁸ or thrombophilia⁹ are at even higher risk. Complications are less common with progesterone-only methods.⁹ These hormonal methods remain a popular form of contraception because, in fact, the risk of these complications is even greater in pregnancy. Accepting even a small risk of severe complications for convenience rather than pregnancy prevention, however, is more difficult to justify.

Many women have less serious side effects such as nausea and/or vomiting. Oral contraceptives may also increase depression¹⁰ and libido^{11,12} in some women. These may not be life threatening but are unpleasant nonetheless. Emotional changes may be particularly troublesome for a woman right before her wedding. Women who have the option of scheduling their wedding without relying on hormonal intervention should weigh the risks and benefits in order to make a fully informed decision.

2. Efficacy in preventing chupat niddah

In general, hormonal interventions are successful in altering a woman's cycle to prevent *chupat niddah*. However, one should remember that unscheduled bleeding occurs in 30% to 50% of women upon the initiation of combined oral contraception use.¹³ It is more common in low-dose

Considering women with migraine with aura, the risk of ischemic stroke in those young women who do not use HC is 5.9/100,000 per year, whereas the same risk among those young women who use HC is 36.9/100,000 per year. Considering women with migraine without aura, the risk of ischemic stroke in those young women who do not use HC is 4.0/100,000 per year, whereas the same risk among those young women who use HC is 25.4/100,000 per year. S Sacco, GS Merki-Feld, KL Ægidius K, et al., "Hormonal contraceptives and risk of ischemic stroke in women with migraine: a consensus statement from the European Headache Federation (EHF) and the European Society of Contraception and Reproductive Health (ESC)," J Headache Pain, 2017; 18:108.

⁹ I Blickstein, "Thrombophilia and women's health: An overview," *Obstet Gynecol Clin North Am*, 2006;33:347-56.

CW Skovlund, LS Mørch, LV Kessing, Ø Lidegaard, "Association of Hormonal Contraception with Depression," JAMA Psychiatry, 2016;1154-1162.

¹¹ LJ Burrows, M Basha, AT Goldstein, "The effects of hormonal contraceptives on female sexuality: a review," *J Sex Med*, 2012;9:2213-23.

¹² NK Smith, KN Jozkowski, SA Sanders, "Hormonal contraception and female pain, orgasm and sexual pleasure," *J Sex Med*, 2014;11:462-70.

¹³ J Villavicencio, RH Allen, "Unscheduled bleeding and contraceptive choice: increasing satisfaction and continuation rates," *Open Access J Contracept*, 2016; 7: 43–52.

preparations.¹⁴ For formulations containing 10–20 mcg, the rate of breakthrough bleeding in even higher.¹⁵ In addition, the situation can worsen if doses are missed. Irregular bleeding, however, generally decreases over time (10% to 30% of women by the third month of use). ¹⁴

3. Time left until the wedding

As breakthrough bleeding is a common occurrence for combination hormonal contraception, especially with the first cycles of use, it is best to start at least 3 months in advance. This allows the body to adjust to the new hormonal milieu and allows time for making changes during the next cycle in case the problem persists. One must remember that individual women may respond differently to any particular intervention. Sometimes, trials of a number of different hormonal formulations are needed to achieve the best result (minimal breakthrough bleeding and minimal side effects). Therefore, if there is only a short gap from the time the question is asked until the wedding, the risks of bleeding from the first cycles of using hormones may be greater than the risk of the cycle changing. In these cases, a predictable natural cycle may be more reliable for some women than hormonal intervention.

When should the decision be made to use?

A physician should be approached for advice as soon as possible after engagement. A complete history should be taken to assure that there are no historical factors (previous history of blood clots, current liver disease, for example) that make the use of estrogen or progesterone too risky. In deciding if intervention is needed at all, the *kallah* should report if in the past, stressful events (trips, etc.) have caused changes in her cycle. A baseline blood pressure reading should be taken, as hypertension is a relative contraindication of combination hormonal contraception use. This should be repeated after a month of use to see if the hormones are causing a significant blood pressure elevation which might put her at greater risk of complications.

MF Gallo, K Nanda, DA Grimes, LM Lopez, KF Schulz, "20 µg versus >20 µg estrogen combined oral contraceptives for contraception," Cochrane Database Syst Rev, 2013 Aug 1;(8):CD003989.

J Endrikat, R Hite, R Bannemerschult, C Gerlinger, W Schmidt, "Multicenter, comparative study of cycle control, efficacy and tolerability of two low-dose oral contraceptives containing 20 microg ethinylestradiol/100 microg levo-norgestrel and 20 microg ethinylestradiol/500 microg norethisterone," *Contraception*, 2001;64:3-10.

The fact that we do not know how a particular woman will react to the pill is yet another important reason—when hormonal manipulation is chosen—to start the process EARLY and allow time for manipulation, if necessary.

Summary of Author's Recommendations

A woman with a known predictable cycle¹⁶ who can schedule her wedding on about the third week of her cycle (late enough to assure that she will be able to finish the *shivah nekiim* but prior to the earliest days that she generally sees her period) is best off NOT using hormones to change anything. If there is a change in her cycle, she should re-consult the physician, as hormones may be used at that point, if needed. It is this author's opinion, that setting the wedding date based on the natural cycle without the need for medical intervention should be encouraged as much as possible. A woman with a menstrual cycle that can vary as much as week may need hormonal manipulation to prevent *chupat niddah*. In this case, the intervention should be started at least three months in advance to allow the body to adjust to the hormones being given and for changes in formulation, if needed.

If a woman consults the physician after her wedding date has been set, and it turns out that the date will most likely be a *chupat niddah*, or if there are other reasons the wedding needs to be scheduled for a more inappropriate time, she should be offered hormonal intervention to prevent *chupat niddah* unless clearly contraindicated. If it is close to the wedding or only a mild delay is needed, progestin is probably the safer choice.

If a woman is already taking a hormonal contraceptive for any medical indication or halachically approved contraception, the cycle can be manipulated using that medication. •

It is thus a good practice for women to be sure to track their cycles, at least from the time they start dating, in order to know their usual pattern.