Infertility: Getting Pregnant and Staying Pregnant

BEATING INFERTILITY

Getting Pregnant and Staying Pregnant: You Can Try This at Home

by John R. Lee, M.D. and Virginia Hopkins

There's no question that more women than ever are having problems conceiving, and that more women are being required to become familiar with the complex issues of infertility in order to become pregnant. The other increasingly common problem of pregnancy is miscarriage: one in three pregnancies in the U.S. ends in miscarriage.

I'm going to give you some simple solutions you can try at home that may help prevent a miscarriage. But first I want to tell you a little bit about your eggs, follicles and cycles, and why you may be having trouble conceiving.

The First Step to Fertility: Popping an Egg

A molecular biologist friend of mine refers to ovulation as "popping an egg." This is a good metaphor for ovulation, because a combination of hormonal and chemical messages in the brain and the ovary all need to coordinate and coalesce at the right moments in the menstrual cycle in order for an ovarian follicle to get the message to mature and "pop" out of the ovary, where it releases the egg into the fallopian tube.

Ovulation is the first requirement for pregnancy, but we can't take it for granted, even in young women. As reported by Peter Ellison of Harvard, a study of 19 presumably healthy premenopausal women with a mean age of 29 found that six of them -- or 31 percent -- failed to ovulate at any time during their menstrual cycle.

When women do ovulate, it doesn't necessarily occur within the narrow time boundaries dictated by traditional medicine. The advent of the saliva hormone assay has significantly broadened our understanding of the timing of ovulation. When salivary testing is done throughout a woman's menstrual cycle, several stunning observations can be made.

For example, ovulation in normal women occurs at almost any time of the menstrual cycle, but most commonly from day 5 to day 15, rather than from day 12 to 14, as most textbooks say.

Salivary testing also reveals that the ovulatory surge of progesterone that occurs after ovulation is lasting for only two to four days in some women, rather than the normal 10 to 12. This means that something is wrong, because adequate progesterone levels are crucial for proper implantation of the egg in the endometrium (the uterine lining) as well as for the survival of the fertilized egg. A fall in progesterone after only two to four days would eliminate the implantation or survival of any fertilized egg.

The Life and Times of Your Follicles

Strange as it might seem, ovaries and testes are formed early in the life of the embryo. By the third week, more than 500,000 follicles are being formed in the embryo's ovary, and each follicle supposedly contains an ovum (egg) awaiting full development after puberty. (In males, the equivalent case concerns Sertoli cells in the testes.) Any of these follicles, upon ovulation, becomes the corpus luteum that produces the progesterone necessary for the survival of the fertilized egg.

Exposure to pesticides or other petrochemical xenobiotics (environmental substances with hormonal effects) during the embryonic period is particularly damaging to the development of ovaries. (For details, read Our Stolen Future by Theo Colborn et al.) That is, the mother may not show toxic effects to minute doses of these toxins, but the embryo is exquisitely sensitive to them. If the embryo is female, her ovarian follicles may be damaged.

These effects have serious consequences. Damaged or dysfunctional follicles will not be able to pop an egg or produce sufficient progesterone later in life. The incidence of progesterone deficiency among women aged 35 in the industrialized world, is about 50 percent. Treatment with progesterone is helpful but not necessarily curative for this condition. Dysfunctional follicles, which cause progesterone deficiency, lead to ovarian cysts. These cysts will usually clear up after proper progesterone levels are restored, but the ovary still may not be able to produce a viable egg. It is also follicle dysfunction which causes many early miscarriages.

What You Can do About Miscarriage

Although there's nothing we can do about a follicle that can't pop an egg, miscarriages caused by “luteal phase failure,” — in which the follicles ovulate normally but fail to continue their progesterone production at levels necessary for successful implantation of the fertilized egg and development of the embryo — can be prevented by progesterone treatment. I encounter women with this problem all the time.

At one of my talks, a woman told me she was having difficulty having a baby. She had a four-year-old son, and has been pregnant several times since then, but each pregnancy resulted in an early miscarriage. Repeated early miscarriages are often caused by luteal phase failure. The problem is common and is occurring in younger and younger women, probably because of embryonic exposure to xenobiotics. These women do not have trouble getting pregnant: their problem is getting the embryo to survive and not miscarry.

What should they do? They need to increase and maintain their progesterone levels to the point where they can support their pregnancy, and they can do this by supplementing with progesterone. Normally when an egg is fertilized, this sends chemical messages that cause the follicle to increase its production of progesterone to 30 to 40 mg per day, double or triple what it made during the luteal phase of the monthly cycle when the woman was not pregnant. The level of progesterone increases gradually until well into the third month of pregnancy. By that time, the placenta is well developed and is producing progressively more progesterone within the uterus. By the third trimester (the final three months of the pregnancy) progesterone production reaches 300 to 350 mg per day, more than 20 times higher than normal.

Correcting Luteal Phase Failure

When supplementing progesterone for luteal phase failure, conventional physicians often use injectable progesterone or vaginal progesterone suppositories in doses of several hundred mg per day. They give so much in order to produce serum levels of progesterone similar to levels in the early pregnancy. But serum levels of progesterone are misleading. Most conventional physicians do not know that 90 percent of bioavailable progesterone is carried by red blood cells and not in the blood serum. Progesterone in the blood serum is protein-bound and less than 10 percent is bioavailable. Because of this simple lack of understanding, conventional medicine routinely gives excessive doses of progesterone to patients with luteal phase failure in order to raise serum progesterone levels. As a result, the success rates for this approach are usually less than 30 percent.

It is much more effective to supplement with transdermal natural progesterone, which is carried in a bioavailable fashion by the red blood cells after absorption. Progesterone creams can easily supply the proper dose of 30 to 40 mg per day, or more if needed. The creams I usually recommend provide 450 to 500 mg of progesterone per ounce. One-quarter teaspoon of cream supplies about 20 mg. This dose can be applied at bedtime and in the morning to provide 40 mg per day. For this use, I recommend avoiding creams with wild yam (diosgenin), herbs or other active ingredients.

As soon as pregnancy is confirmed by a blood test, a woman at risk for miscarriage should start using a progesterone cream that supplies that dosage. (Women who are already using progesterone cream should simply continue if they become pregnant, and increase the dose.) After the first month of pregnancy, the dose can be increased gradually to 60 to 80 mg per day.

After the third month of pregnancy, progesterone production in the placenta increases so much that, in theory, supplemental progesterone becomes less important. However, most of my patients felt more

comfortable continuing the cream throughout pregnancy, and stopping one week before their expected delivery date.

At that time the baby triggers its own delivery by excreting cortisol in its urine. This reduces progesterone's uterine effects, and allows uterine contractions. In the mother's body, the steep fall in progesterone that occurs with delivery stimulates the production of the hormone prolactin, which stimulates the production of milk. Women who suffer from postpartum depression often find relief when they use a little bit of natural progesterone cream.

Thus it's clear why progesterone is the progestational hormone: its presence at the proper time and in the proper amounts is essential to conceiving and maintaining a healthy pregnancy.

SOME POSSIBLE CAUSES of INFERTILITY or the INABILITY to CONCEIVE

Some of the more common underlying causes of the inability to conceive (excluding problems with the sperm) could include the following:

- Mechanical obstructions (blocked Fallopian tubes)
- Hormone problems (e.g. hypothyroidism)
- Primary ovary failure (ovaries fail to develop)
- Secondary ovarian failure (e.g. after years of birth control pills)
- Improper timing of intercourse (the presumption that ovulation only occurs at day 12 to 14 days of the menstrual cycle is erroneous)
- Toxicity (fertility rates inversely correlate with fluoride exposure for example)
- Genetic (Turner's syndrome for example)
- Stress (stress-induced anovulatory — non-ovulating — periods are common)
- Nutritional (anorexia — starvation routinely limits fertility)

The list of possible causes of infertility is actually much longer than this. Achieving successful pregnancy is a precarious thing; experts think that one-third of all fertilized eggs fail to survive.

QUESTION ABOUT PROGESTERONE INJECTIONS FOR INFERTILITY

Q: I'm 37 years old and my husband and I haven't been able to have a baby. I'm working with a fertility specialist now who wants me to have progesterone injections. Will progesterone cream work just as well?

A: While I don't have any formal studies to back me up, I do have mail from hundreds of women who have finally been able to conceive after using progesterone cream. The makers of Crinone, a vaginal time-release progesterone gel, have recently announced that their gel is at least as effective as daily progesterone injections for achieving and maintaining pregnancy. This is still one step away from applying progesterone cream to the exterior of the body, but it's a nice piece of confirming evidence that points in the right direction.

The manufacturer of Crinone based its conclusions on an analysis of studies of 1,251 women in 16 centers who underwent in vitro fertilization. Researchers found that the clinical pregnancy rate was 35.2 percent among women who used progesterone gel, significantly higher than women who got progesterone injections.

If you do decide to use a progesterone cream, please make sure it is one that has no other hormonally active ingredients besides progesterone, such as DHEA or pregnenolone. Since we don't know what effect they might have on a developing fetus, you must also be careful to avoid ingredients you're not sure of, such as herbs. Common examples are: wild yam extract, black cohosh, rosemary, dong quai, damiana, ginseng, burdock root, cramp bark, saw palmetto, sarsaparilla, and chaste tree berry extract (vitex).

In a related story, in Oct 1999, the FDA approved a 200 mg daily dose of Prometrium, an oral

progesterone, for use in preventing uterine cancer in women taking estrogen. This is an important landmark, because in the past, detractors of progesterone (versus promoters of progestins) have claimed it wasn't strong enough to oppose estrogen and prevent cancer.

The 200 mg daily dose of oral progesterone actually delivers about 20 mg of progesterone daily (about 180 mg of it is excreted by the liver or transformed to other substances), the same dose I have recommended for 20 years to women using progesterone cream. As my readers know, I do not recommend using oral progesterone because those 180 mg that are excreted or transformed can cause all kinds of problems. (For details on this topic, please read my books or back issues of this newsletter.)

I'm happy to tell you that there are currently two studies underway examining the efficacy of progesterone cream in preventing uterine cancer.

FERTILITY TREATMENTS CAN PROMOTE OR CAUSE CANCER

The November 6, 1999 issue of The Lancet reports on a significant study from Australia, which looked at nearly 30,000 women who had undergone in vitro fertilization. Those who had at least one round of treatment involving super-ovulation (forced ovulation using potent fertility drugs such as Clomid) had twice the normal incidence of breast cancer and five times the normal incidence of uterine cancer.

Women who were infertile for unexplained reasons had nearly three times the normal incidence of ovarian cancer and five times the normal incidence of uterine cancer.

Researchers involved in the study speculated that the fertility drugs used in the fertilization procedure may promote already-existing cancers, and called for more thorough examination of patients before fertility treatment is undergone. Doesn't this sound like common sense? When a woman is infertile, something is obviously not working right. Before you take a potent drug that forces your ovaries to produce many more eggs than normal, be sure that you are thoroughly tested for cancer, and keep in mind that you may have a higher predisposition to cancer than other women.

Dr. Lee has repeatedly pointed out that most infertility is caused by luteal phase failure -- the lack of progesterone shortly after fertilization or some time prior to the development of the placenta. When this happens, the pregnancy is lost. This type of progesterone deficiency will only be picked up accurately by a saliva hormone test. The lack of progesterone also means estrogen dominance and high surges of FSH. Either or both of these may increase the likelihood of ovarian and endometrial cancer.

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These articles were originally published in the John R. Lee M.D. Medical Letter. Although the Medical Letter is no longer published, you'll find many articles from it on this website.
http://www.virginiahopkinstestkits.com/infertility.html