

WDDTY

WHAT DOCTORS DON'T TELL YOU

A review of conventional medicine and safer alternatives

- 3 **Viewpoint:** Progesterone: the debate is over
- 4 **News:** Vitamin C for cancer; acupressure for back pain
- 5 **Letters:** More on pH, vitamin C and soy
- 6 **Special report:** 'Natural' progesterone and cancer
- 10 **Readers' corner:** Foot fungus and watery eyes



- 15 **Alternatives:** Natural ways to treat skin cancer
- 16 **Drugs:** Benzocaine
- 17 **Drug alerts:** Laughter, the best medicine; OTC reactions underreported
- 18 **Health alert:** Risky laser treatments
- 20 **Q & A:** Itchy scalp; rosacea
- 22 **Harald Gaier:** PMS



'Natural' progesterone

The cancer risks revealed



The end of the debate

I first met Dr John Lee, a Californian family practitioner, when he came to London in the mid-1990s. He was definitely a man with a mission.

He believed that he'd discovered the source of menopausal symptoms, osteoporosis—indeed, virtually every female problem on the planet. The culprit was 'oestrogen dominance'. The solution, he believed, which he intended to announce to the world, was 'natural' progesterone. His was a highly plausible line: today's women are overwhelmed by environmental oestrogens, and so need progesterone to hormonally balance themselves.

Lee also maintained that since the type of progesterone he advocated was biochemically identical to what the body produced, it was safe to use. In this way, his 'natural' hormone differed from hormone replacement therapy (HRT) or the Pill. These were dangerous because they comprised hormones that were synthetically produced. They were nothing like the real thing.

As a result of Lee's proselytizing, alternative practitioners began to prescribe natural progesterone with enthusiasm. Cosmetically produced progesterone creams exploded into a multi-million dollar, largely unregulated industry overnight.

I remained unconvinced. What bothered me about the story at the time was my discovery that 'natural' progesterone was not a natural *anything*.

It was a substance made in the laboratory by taking the sterol base of wild yam and chemically tweaking it, adding molecules here and there until you produced something with the same molecular blueprint as ovary-derived progesterone. It was, in other words, a drug.

If this was something produced in the test tube, I wondered, what was the difference between giving a woman progesterone and giving her HRT?

What also bothered me was that progesterone is primarily a pregnancy hormone. Women are finished with pregnancy at the menopause. What is the effect of taking a hormone that you're not supposed to need anymore?

Finally, I thought about the fact that progesterone is an immunosuppressant. High circulating levels of progesterone

allow a woman to carry a foreign protein (i.e., a foetus) in her body for nine months without expelling it. Thanks to progesterone, I was no longer allergic to wheat when I was pregnant. So what, I wondered, was the effect of taking something over the long term that turns your immune system down to low?

Lee found in progesterone an all-purpose cure-all. Over the years, he recommended rub-on cream for more arcane uses: to prevent premature birth, and as a treatment for reflux. And, most dangerously, he began recommending it to prevent breast cancer.

Although most of the medical community embraced Lee's theory, one lone wolf besides me remained sceptical. As a young doctor, Ellen Grant had been an one of the main UK researchers of the first birth control pills of the 1960s, and she witnessed first-hand what they were able to do to women. She denounced the Pill, and for more than 40 years she went on to research the effects of exogenous hormones. She was one of the few people willing to question many of Lee's basic assumptions.

The fruits of her research, in this month's cover story, offer stark new evidence that Lee's simple, well-intended message was not only wrong, but also dangerous. Progesterone of any variety is carcinogenic. Indeed, it is progesterone, rather than oestrogen, that is the most carcinogenic hormone of the two.

There are two morals to this story. The first is that, for all of us in alternative medicine, it's important to resist a suspension of all disbelief when it comes to products touted as natural.

The second is a simple and sobering truth: taking extra sexual hormones at any point in your life is likely to give you cancer.

Hormones are finely tuned substances. We tamper with them at our peril.

Lynne McTaggart



What Doctors Don't Tell You

Satellite House
2 Salisbury Road
London SW19 4EZ
Tel: 020 8944 9555
Fax: 020 8944 9888
E-mail: cs@wddty.co.uk
www.wddty.co.uk

Editor
Lynne McTaggart
Deputy Editor
Amanda Diamond
Contributing Editor
Tony Edwards
Production Editor
John Ormiston
Design
John Clement
Editorial Assistant
Joanna Evans

Marketing

Andrew Miller (Manager)
Nicolette Vuvan

Subscriptions

Kristy Downton
Customer Service
Michele De Villiers

Accounts
Mark Brandwood
Publisher
Bryan Hubbard

Advertising department

Jenny Scott
Cabbell Ltd
Woodman Works
204 Durnsford Road
London SW19 4SD
Tel: 0208 971 8454
Fax: 020 8971 8480

Editorial Panel

Dr John Mansfield
Dr Patrick Kingsley
Dr Jean Monro
Annemarie Colbin, PhD
Anne Gaskell
Janet Balaskas
Dr Ellen Grant
Dr Harald Gaier
Dr Melvyn Werbach
Dr Michel Odent
Dr Keith Mumby
Dr Jonathan Wright
Prof Gordon Stewart
Dr Vickie Rippere
Craig Sams
Sally Bunday (Hyperactive
Children's Support Group)

LIABILITY STATEMENT

While every care is taken in preparing this material, the publishers cannot accept any responsibility for any damage or harm caused by any treatment, advice or information contained in this publication. You should consult a qualified practitioner before undertaking any treatment.

ISSN 1352-1241

SUBSCRIPTIONS

What Doctors Don't Tell You is published every month. An annual subscription costs £79 (£86 for non-UK subscribers).

© WDDTY Ltd 2006
No part of this publication may be reproduced without permission.

Cancer in a cream?

*In the mid-1990s, the late Dr John Lee championed the use of natural progesterone as an all-purpose curative for any and all female problems, particularly those of the menopause. Dr Ellen Grant, author of **The Bitter Pill and Sexual Chemistry**, did not share his enthusiasm. In 1996, WDDTY asked them both to battle it out in our pages. Some 10 years later, Dr Grant has the last word about new evidence of cancer risks.*

It was Dr John Lee's contention that many, if not most, modern women suffer from 'oestrogen dominance', largely caused by xenoestrogens from petrochemical sources, such as petrol fumes.

Consequently, he maintained, they are low in progesterone—the 'good' female hormone. Progesterone is the female sex hormone secreted by the corpus luteum during the second half of the menstrual cycle, the adrenal cortex or the placenta during pregnancy. Its function is to prepare the uterus for pregnancy and then to maintain the pregnancy once it has occurred.

This imbalance, he contended, accounted for breast cancer, recurrent miscarriage and other complaints. It

was the platform on which his entire case rested: that women who are low in progesterone or menopausal should be given 'natural' progesterone.

He recommended rub-on creams or gels, because when taken orally ordinary progesterone is destroyed by the liver (this is not the case with synthetic progestogens, which get metabolized). Although progesterone in progesterone cream is called 'natural' because it is derived from yams, all such progesterone is made in the laboratory. Chemists take the sterol diosgenin from yam and manipulate it in a test tube, adding extra molecules here and there to approximate the compound the female ovary produces.

Lee's main argument was that as the progesterone used in rub-on creams was 'chemically identical' to that

produced in the body, it was safe, unlike the artificially produced progestogens used in the Pill or hormone replacement therapy (HRT).

The reality is that even a woman's own natural endogenous progesterone is potentially dangerous. Progesterone is a primitive steroid that is highly immunosuppressive and potentially carcinogenic. Progesterone levels are highest during pregnancy; although it is rare to develop breast cancer at that time, when it does, it can spread with the speed of an abscess. Indeed, for nearly 200 years the main treatment for breast cancer in a young woman was the removal of her ovaries to take away her main source of progesterone production.

Unhealthy ratio of hormones

In healthy women, progesterone levels are never high without high oestrogen levels—either in the luteal phase of the menstrual cycle or during pregnancy. This helps to protect against progesterone-induced immunosuppression, which maintains pregnancy by preventing the rejection of the foreign paternal proteins in the fetus.

Flushed with allergies

Women suffering from hot flushes can easily prove that hot flushes are part of a vascular allergic reaction to common foods or chemicals. In 1979 I published the results of a study entitled "Food allergies and Migraine" (*Lancet* 1979; i: 966-69). Sixty migraine patients stopped all medications, including contraceptive and menopausal hormones, and also stopped smoking and drinking alcohol. The patients followed the low-allergenic "lamb and pears diet" of Dr John Mansfield. The aim of the diet is to avoid all common foods but lamb and pears for five days. Withdrawal symptoms from allergies can occur and hidden food allergens can be unmasked.

In the study, many of the most allergenic foods commonly caused many vascular reactions, including flushing, headaches, pulse or blood pressure rises. The biggest culprits were wheat (78 per cent) oranges (65 per cent), eggs (45 per cent), tea and coffee (40 per cent each), plus corn, cane sugar and yeast (33 per cent each). The commonest chemical allergens were cigarette smoke and domestic gas.

In my experience these reactions to foods and chemicals increase if zinc, copper and magnesium, and B vitamins and essential fatty acids are deficient.

Deficiencies of zinc and copper in particular can severely disturb immune-system homeostasis, including lymphocyte and antibody production, and make people more prone to allergies. Supplementation is usually needed to replete these deficiencies.

In our study, once patients avoided their main food and chemical allergens, their vascular reactions disappeared. Of those suffering frequent headaches and migraine, 85 per cent of patients became headache-free and none required medication. In those with hypertension, their blood pressure regularized.

Women who have been taking progestogens and/or oestrogens or antibiotics often have an overgrowth of candida albicans in the gut, and so benefit from an anti-candida regime, with anti-fungal medicine or substances, low-sugar diet and probiotics. (For more information, see the **WDDTY Guide to Candida and ME**).

Other natural treatments to watch out for

Progesterone is not the only substance that may cause proliferation of breast cells. The following substances should be taken with caution or avoided.

Soy: Women who eat soy to avoid breast cancer can develop the very disease they are trying to prevent. Several studies show that soy can cause breast cancer cells to proliferate (*Endocrinology*, 1978; 103: 1860-7). Phytoestrogens in the diet can have oestrogenic effects on breast tissue (*J Clin Endocrinol Metab*, 1999; 84: 4017-24)—genistein and daidzein soy proteins particularly possess a stimulatory effect on the breast (*Cancer Epidemiol Biomarkers Prev*, 1996; 5: 785-94). In addition, soy blocks the uptake of zinc and magnesium (*J Am Diet Assoc*, 1988; 88: 1562-6).

Don quai and ginseng: These herbs are among some of the popular remedies used to treat menopausal symptoms. In a study that investigated the oestrogenic effect of a number of popular herbs used during menopause, *Don quai* and ginseng were found to proliferate breast cancer cells (*Menopause*, 2002; 9: 145-50). In this study both these herbs were found to promote the proliferation of MCF-7 cells, a human breast cancer cell line. *Don quai* induced this cell growth 16-fold, while the use of ginseng increased the cell growth 27-fold.

Black cohosh: Although this natural supplement appears to be the best option for the treatment of menopausal symptoms (*Ann Intern Med*, 2002; 137: 805-13), it should not be used for longer than six months. Neither should it be used if there is a history of breast cancer in the family, as even this herb has shown a tendency to spread breast cancer, albeit in one animal study (VL Davis, et al. *Amer Assoc Canc Res annual meeting*, July 11-14, 2003, Washington, DC, abstract R910).

Herbs: Evidence shows that women may be substituting one type of hormone replacement treatment for another. Plant oestrogens can have just as powerful an effect as synthetic ones. In one study, plants were tested for their ability to compete for estradiol and progesterone receptors in human breast-cancer cells. Those found to bind to oestrogen receptors—soy, liquorice, red clover, thyme, turmeric, hops and verbena—acted as tumour promoters (*Proc Soc Exp Biol Med*, 1998; 217: 369-78).

Amanda Diamond

Although oestrogens increase antibody production, progesterone decreases antibody production, which may be one reason why progesterone is more carcinogenic for the breast than oestrogen.

New research using breast cancer cells has discovered that progesterone encourages breast cancers to spread rapidly and metastasize. Progesterone also induces rapid growth of leaky blood vessels.

Professor Gary Owen in Chile and Professor Jan Brosens at Hammer-smith Hospital, London, discovered that these breast cancer cells displayed an 18-fold increase in messenger ribonucleic acid (mRNA) tissue factor (TF) expression after only six hours of progesterone treatment. High TF expression is associated with an increased invasive and metastatic potential of many types of malignancy (*J Clin Endocrinol Metab*, 2005; 90: 1181-8).

TF increases strongly relate to increased secretion of angiogenic mediators, such as vascular endothelial growth factor (VEGF), which are also important in the growth of cancer. TF bound to clotting factor VII provides protection against cell death, which aids the development and survival of cancer cells. Overexpression of TF has been linked with the increased clotting tendencies seen in cancer patients.

The authors of the study discovered that both progestin and progesterone cause an increase of epidermal growth factor (EGF) signalling, which in turn provides a survival advantage to new cancer cells. It is this increase in EGF signalling that may contribute to the breast-cancer risk associated with either endogenous progesterone or with progestin-containing HRT. According to the authors, their results show that natural progesterone and synthetic progestogens both have a similar action in the body.

This evidence kicks away the main platform on which Lee built his case—that natural progesterone is somehow safer than synthetic progesterone. This is hardly surprising, as progestogens were manufactured specifically to imitate the effect of progesterone in the body. The evidence is now clear—natural progesterone is just another form of HRT.

Dr Sebastian Mirkin and his colleagues from Eastern Virginia Medical School measured the effect of various concentrations of estradiol (a form of oestrogen), progesterone and synthetic progestogens on two forms of VEGF. They used two breast-cancer cell lines, one of which was composed of cells rich with oestrogen receptors and the other of which was rich with progesterone receptors. A positive effect on VEGF would indicate a substance that promotes cancer.

Both progesterone and progestogens increased VEGF, with the highest doses having the greatest effect. However, the natural oestrogen 17-beta-estradiol had no effect in any dose (*Fertil Steril*, 2005; 84: 485-91).

Interestingly, the progestogen medroxyprogesterone acetate (MPA) had a greater effect on VEGF than the other progestogens tested. MPA causes the most rapid proliferation of breast

cancer cells experimentally. MPA, along with megestrol acetate, is a 'pure' progestogen with no other sex hormone actions, and so closest in form to 'natural' progesterone.

So the effect of regular rub-on progesterone (or, indeed, taking HRT or the Pill) is continuous exposure to progesterone or progestogens that stimulates angiogenesis over longer periods than occurs in the secretory phase of a normal menstrual cycle. And increased angiogenesis leads to cancer.

Link with arthritis

Professor Maurizio Cutolo, a distinguished international expert in rheumatoid arthritis (RA) and systemic lupus erythematosus (SLE) from Genoa, Italy, has studied the way in which sex hormones modify the immune system. Progesterone inhibits immune cell growth and increases cell death, while oestrogens protect against cell death and increase antibody formation.

He is concerned that, in both men and women with autoimmune diseases, sex hormones in peripheral tissues convert into very high levels of carcinogenic oestrogen metabolites (*Rheum Dis Clin North Am*, 2005; 31: 19-27). This results in lowered levels of the hormones androgen DHEA, testosterone and progesterone. However, giving these patients progesterone simply makes matters worse, increasing the risk of autoimmune disease, such as systemic lupus erythematosus (SLE). SLE now affects nine young women for every man.

The dose of levonorgestrel (LN) used as the morning-after pill for emergency contraception in one day is equivalent to 60 times the daily dose of norgestrel, which induces endometrial progestogenic and angiogenic changes. The UK GP database shows evidence that two or more exposures to the LN emergency contraception may increase the risk of multiple sclerosis (MS) by three times (*Arch Neurol*, 2005; 62: 1362-5).

Lee's other argument was that rubbing on progesterone cream maintained a 'safe' level in the body, compared with the large amounts

Natural ways to beat the menopause

● **Remember your adrenal gland.** A healthy adrenal gland will continue to supply your postmenopausal body with a form of oestrogen. The herb *Rhodiola rosea* (golden root) is reputed to have antistress, mood- and memory-enhancing actions. Other herbs like *Panax ginseng* and *Ashwagandha* may also help.

● **Uncover your allergies,** with a food-elimination diet. Also consider chemical allergies as potential culprits. Minimize your exposure to toxic toiletries, perfumes and cleaning products.

● **Eat a variety of foods and increase your intake of plant foods.** This increases the number of different phytochemicals you ingest and decreases the likelihood that any one type will be ingested in unbalanced and overly large amounts. The most recent evidence suggests that women who follow such a diet are at lower-risk of premature death from all causes (*JAMA*, 2000; 283: 2109-15). Make sure to have adequate amounts of good-quality protein. Also, avoid sugar, caffeine, alcohol, and fried and highly processed foods.

● **Supplement with more than calcium and vitamin D.** Make sure you are getting enough potassium (2-3 g daily) and pantothenic acid (vitamin B5, 25-100 mg daily), either in your diet or through supplements. Low levels of vitamin B5 can result in fatigue, headache, sleep disturbances, nausea and abdominal discomfort. Your body needs adequate amounts of vitamins C and B6 as well as zinc, copper and magnesium for the adrenal gland to manufacture its hormones.

● **Take boron.** This is helpful in preventing postmenopausal osteoporosis as it stimulates the body to produce more of its own oestrogen (*J Trace Elem Exp Med*, 1992; 5: 237-46). Low levels of boron have been associated with an increased risk of atherosclerosis and a decline in cognitive function (*Biol Trace Elem Res*, 1997; 66: 273-86; *Environ Health Perspect*, 1994; 102 [Suppl 7]: 65-72).

● **Omega-3 fatty acids** can help with menopausal problems, and may also help to prevent postmenopausal osteoporosis, breast cancer and cardiovascular disease (*Obstet Gynecol Surv*, 2004; 59: 722-30). Omega-3s lower triglycerides, high levels of which are associated with heart disease, particularly in women. Good dietary sources include oily fish, such as salmon and mackerel, and linseed oil, one of the most concentrated plant sources of Omega 3.

● **Stay active.** Research suggests that women who exercise at least 30 minutes a day cut their risk of breast cancer by 10 per cent; one hour a day cuts the risk by 20 per cent (*Arch Intern Med*, 1999; 159: 2290-6).

given as part of the Pill or HRT. Research carried out recently shows that rub-on cream can produce levels in the blood that are just as high as those that result from oral consumption.

In 2004 a Canadian doctor called Anne Hermann discovered that over-the-counter progesterone cream produced equally high whole-blood levels as a daily oral micronized progesterone pill. In her study, Dr Hermann warned that using topical progesterone could possibly increase the risks of coronary artery disease, stroke, thrombosis and breast cancer (*J Clin Pharmacol*, 2005; 45:

614-9). Furthermore, in the British Million Women Study (MWS) of HRT, the delivery system did not matter—use of either oral or transdermal hormones caused similar increased risks of breast cancer.

The first patient I saw who had used progesterone cream was an American. After she had a mastectomy for breast cancer, the patient rubbed progesterone on her remaining breast, but soon developed a second breast cancer.

There are few long-term studies of the effect of rub-on progesterone. However, now that progestogens have

been found to act on the body similarly to natural progesterone, the many studies of the Pill and HRT give some idea of the cancer risks.

Until recently, progestogen combinations of the Pill or HRT were sold to women on the basis that using progestogen helps to keep the cancer risks of oestrogen in check. These days it is acknowledged that using oestrogen-only HRT or the Pill in a woman with a womb increases her risk of endometrial cancer by 20 times. This is largely because oestrogen causes the rapid proliferation of endometrial cells. Doctors believed that they could 'oppose' this build-up by giving women progestogen for 10–12 days a month, which would imitate the second half of the menstrual cycle and keep cancer from growing.

However, in the largest scale studies of HRT, synthetic progestogens were found to be more carcinogenic than oestrogen. Since 2002 several large international trials of HRT, including the Women's Health Initiative (WHI) and the MWS have been stopped early because of 'unacceptable' increases in breast cancers, heart attacks, strokes and thrombosis (*JAMA*, 2002; 288: 321–33; *Lancet*, 2003; 362: 419–27).

Martina Doeren, a professor at Free University of Berlin, an Honorary Visiting Professor at King's College, Department of Obstetrics & Gynaecology, an epidemiologist and an international expert on the menopause, conducted a meta-analysis of HRT studies published from 1989 to 2004. She discovered that the risk of breast cancer for those using oestrogen HRT increased up to 3 per cent a year. However, those patients who had used progestogen-based HRT faced a risk three times as high—9 per cent a year (*Human Reprod Update*, 2005; 11: 561–73).

Both the WHI study and the MWS found that progestogens caused more breast cancers than oestrogens and that the risks increased the longer the drugs were used. There were three times more extra cases at five and 10 years of use with progestogen HRT than with oestrogen HRT. In



2006 a study from Sweden found 5.6 times more lobular breast cancer (grows in the cells that line the lobules of the breasts) and 6.5 times more tubular breast cancer (the cells appear tubular under the microscope) with five years or more use of progestogen HRT (*Breast Cancer Res*, 2006; 8: R11).

The Swedish HABITS (Hormonal Replacement Therapy after Breast Cancer—Is It Safe?) trial was terminated after 2 years because 28 patients, mostly current HRT users, had new breast-cancer events, compared with five in non-users (*Lancet*, 2004; 363: 453–5).

Similar results have occurred in studies of the birth control pill. The variety most likely to cause cancer is the combination pill, which contains both synthetic oestrogen and progestogens. A re-analysis of 54 studies of oral contraceptives (OCs) found that use of the Pill before 20 years of age doubled the risk of breast cancer (*Lancet*, 1996; 347: 1713–27), which is the same increase as for HRT in the MWS. In the US Cancer and Steroid Hormone (CASH) study, all of the women diagnosed with breast cancer before 25 years of age, and 96 per cent of those diagnosed before 44 years of age, had used combined OCs (*Lancet*, 1983; ii: 970–3).

The worst effect, however, was with progestogen-only pills (POPs). In a UK study, those given POPs increased their risk of breast cancer by 60 per cent after less than a year of use (*Lancet*, 1989; i: 973–82).

Furthermore, studies of the use of depot MPA, or Depo-Provera®, the morning-after pill, increased breast cancers by 4.6 times for users of two years or more (*BMJ*, 1989; 299: 759–62).

Other research has found that the

risk accumulates the more hormones you take. Dr Louise Brinton, senior investigator of the Hormonal and Reproductive Epidemiology Branch of the US's National Cancer Institute, reported that use of hormones has a cumulative effect. Taking the Pill for 10 years or more and then taking HRT for three years or more increases breast cancer risk three times compared with non-takers of either (Menopause, 1998; 5: 145–51). Brinton also found that women who started using OCs at least 20 years before HRT were twice as likely to have a certain type of breast cancer (*Cancer Epidemiol Biomarkers Prev*, 2002; 11: 1100–3).

If women are using any progesterone product, whether transdermal, oral, implanted or intrauterine devices (IUDs), mammograms become more difficult to interpret because of immediate increases in breast density (*BMJ*, 1989; 299: 759–62). Of course, this results in more mammography with further exposure to radiation, posing a greater risk of breast cancer.

The final irony is that progesterone can cause many of the symptoms menopausal women are trying to alleviate—vaginal dryness (and therefore painful sexual intercourse), vaginal thrush, and cervical infections with more risk of cervical cancer.

The menopause is nature's way of protecting women from the dangers of raised levels of progesterone. There is no single magic cure (or rub-on cream) for the man-defined 'disease' of the menopause. The best way to approach it is to observe those simple rules that will offer a lifetime of good health: consume a low-allergy diet with plenty of good-quality protein, get checked for your nutritional status and follow a monitored supplement programme, treat any overt or hidden infections and avoid tobacco and alcohol.

Dr Ellen Grant

Dr Grant is author of *The Bitter Pill* (HarperCollins, 1986) and *Sexual Chemistry* (Cedar, 1994). The British Society for Ecological Medicine is holding an international meeting on progesterone and breast cancer at the Royal College of General Practitioners, 10 November 2006. (For details: www.ecomed.org.uk).