Women's Health Risks Associated with Orthodox Medicine – Part 3

by Gary Null, PhD, Debora Rasio, MD, and Martin Feldman, MD

With the third installment of this series, we conclude our examination of conventional medical practices and women's health. Part 3 looks at problems associated with the use of oral contraceptives; Parts 1 and 2 covered topics relating to pregnancy, childbirth, breast-feeding, hysterectomies, cesarean sections, and episiotomies.

As established in the earlier installments, orthodox medicine contends that only its treatments have withstood the level of scientific scrutiny needed to support their use. However, the research reports presented in our series call that notion into question. These articles show that the safety and effectiveness of many conventional therapies provided to women cannot be taken for granted.

Surprisingly, perhaps, the source of these research reports is conventional medicine itself. The articles come from orthodox medicine's own peer-review journals, not from the world of complementary medicine.

Oral Contraceptives

The conventional and complementary models of medicine have very different philosophies about many aspects of health care—and oral contraceptives clearly point out those differences. Conventional medicine supports this form of contraception, even though it works against the body's natural processes.

Oral contraceptives suppress the functioning of the reproductive system, and the consequences of that tampering are felt by many women. Some 10 million American women take oral contraceptives at any given time, but the negative side effects lead one-third to one-half to stop using them within a year.[1]

How do oral contraceptives prevent pregnancy? In essence, they supply above-normal levels of non-bio-identical hormones to the body. These artificial substances interfere with reproductive processes. Some oral contraceptives contain both estrogen and progesterone in non-bio-identical forms, while others (called minipills) contain a synthetic progesterone only.[2]

The combination pills elevate estrogen levels in the first half of the menstrual cycle, thus preventing the pituitary gland from releasing follicle-stimulating hormone. Without FSH, an egg cannot develop in the ovary.[3] (One type of estrogen used in oral contraceptives, ethinyl estradiol, is as much as 1,000 times more potent than the estradiol produced by the female body.[4])

In the second part of the cycle, the synthetic progesterone goes to work. Higher levels of this substance thicken the cervical mucus and prevent the uterine lining from building up. If this lining is too thin, the uterus would not be able to support an

implanted fertilized egg if an egg were to be released or if sperm were to get through the cervical mucus.[5]

The progesterone-only minipill is limited to the latter two roles—thickening the cervical mucus and inhibiting the buildup of the uterine lining. Many women now take this form of oral contraceptive, which is about 96 percent effective in normal use. Although this level is very acceptable, it means that the minipill is not much more effective than barrier methods (condoms, diaphragms, and cervical caps) when they are used consistently.[6]

For physicians who practice complementary medicine, a chemicalized intervention in the body's hormonal systems is not the ideal way to prevent pregnancy. Even in low-dose formulations, oral contraceptives have some significant drawbacks. The above-normal levels of hormones may indeed prevent pregnancy, but they also travel through the bloodstream and affect organs that are unrelated to contraception. In the process, they often precipitate or worsen serious underlying conditions.[7]

Non-bio-identical hormones may cause other problems as well. They can affect one's mood or exacerbate a tendency toward depression, decrease sexual desire, cause hair loss, fatigue, or a bloated feeling, and lead to weight gain over time. In addition, oral contraceptives may interfere with the ability to absorb certain vitamins (including B_1, B_2, B_6, B_{12}, C, E and folic acid) and alter the metabolism of carbohydrates. Oral contraceptives become far more risky for women who smoke.[8]

Although oral contraceptives may be an effective form of birth control—and a convenient one for doctors and patients alike—their ease of use comes at a price. According to the studies presented here, oral contraceptives are associated with

increased risks of cardiovascular disease, breast cancer, uterine cancer, gallbladder disease, and other health problems.

The risks of cardiovascular disease are especially pronounced. Numerous studies of this relationship have been published in the medical journals—some reporting an increased risk of death from cerebrovascular disease or pulmonary embolism for women who take oral contraceptives.[9-10] In general, the studies have found that oral contraceptives are associated with an increased risk of problems such as strokes, venous thrombosis, and pulmonary embolism.

In terms of strokes, one study published in the *Journal of the American Medical Association* in 2000 found a 2.75-fold higher risk of ischemic stroke for oral contraceptive users, compared with nonusers. The study, a meta-analysis of 16 trials focusing on this relationship, found that the risk increases along with the dose of estrogens: Low-dose estrogen preparations were associated with a 2-fold increased risk, and the researchers note that this finding runs counter to the notion that women who use lower-dose estrogens do not face the excess risk of stroke associated with oral contraceptives.[11] Other studies have found a similarly heightened risk of stroke—in the 2- to 3-fold range—for users of oral contraceptives, compared with nonusers or the general population.[12-14]

In addition to strokes, another concern for women who use oral contraceptives is an increased risk of deep venous thrombosis, venous thromboembolism, and/or pulmonary embolism—all problems with blood clotting that can block vessels or organs. A study published in *The Lancet* in 2000 found an almost 10-fold increased risk of dying from pulmonary embolism, in which a blood clot has traveled to the lung, for

women of childbearing age who use combined oral contraceptives. According to the researchers, this finding is especially noteworthy because the deaths are occurring in "healthy young women who would have otherwise had a long life expectancy ahead of them."[15]

The cardiovascular risks posed by oral contraceptives are joined by cancer risks as well. Research shows that oral contraceptives increase the risks of uterine cancer, liver cancer, and thyroid cancer. More than a decade ago, for example, a 1986 study reported that 20- to 44-year-old women taking oral contraceptives had a 4-fold increased risk of dying from liver cancer.[16]

We acknowledge that other research reports may exist which reach different conclusions about oral contraceptives and cancer risk. However, we have elected to focus this report on studies that document the dangers associated with medical interventions in wide use. Some doctors are begrudgingly acknowledging an increased risk of cancer among certain subgroups of women who use oral contraceptives, especially those who have a mother or sister who had cancer.[17]

The studies that follow examine the relationship between oral contraceptives and cardiovascular disease and cancer risk, as well as gallbladder disease, inflammatory bowel disease, and Type 2 diabetes.

Oral Contraceptives and Cardiovascular Disease

The following studies leave little doubt that women who use the chemicalized hormones

in oral contraceptives face an increased risk of cardiovascular disorders. Strokes and venous thrombosis are among the problems that have been linked to the use of oral contraceptives. These studies show that oral contraceptives alter the normal physiology of the female reproductive system at a price.

The results of this study, conducted on 46,000 women followed-up for 25 years, show that users of oral contraceptives have a 2.5 increased risk of death from cancer of the uterine cervix, a 2-fold increased risk of death from cerebrovascular diseases, and a 5-fold increased risk of death from liver cancer compared to nonusers. Use of oral contraceptives is associated with an 80% decreased risk of death from ovarian cancer. The adverse effects on mortality persisted for 10 years after interruption of oral contraceptive intake, and ceased afterwards.

—Beral V, et al., Mortality associated with oral contraceptive use: 25 year follow up of cohort of 46,000 women from Royal College of General Practitioners' oral contraception study. *BMJ* 1999; 318:96-100 (9 January).

The results of this study show that women aged 20-44 years taking oral contraceptives have a 5-fold increased risk of myocardial infarction (MI), compared to nonusers. Women taking oral contraceptives and smoking 10 or more cigarettes per day have an over 20-fold increased risk of myocardial infarction, compared to those with neither risk factor. Use of oral contraceptives in women with a history of hypertension during

pregnancy or at any other time is associated with an over 10-fold increased risk of MI. The risk seems to remain constant throughout duration of oral contraceptive use, and no longer persists after discontinuation of use.

—Acute myocardial infarction and combined oral contraceptives: results of an international multicentre case-control study. WHO Collaborative Study of Cardiovascular Disease and Steroid Hormone Contraception. *Lancet* 1997 Apr 26; 349(9060):1202-9.

The results of this study show that users of oral contraceptives of the third generation containing gestodene or desogestrel, have a 40% and 60% increased risk of dying from cardiovascular disease, respectively, compared to users of oral contraceptives of the second generation containing levonorgestrel. In addition, use of the third-generation progestins desogestrel and gestodene was found to be associated with a 90% and 80% increased risk of deep venous thrombosis and pulmonary embolism, respectively, compared to use of the older pills containing the progestin levonorgestrel.

—Jick H, Jick SS, Gurewich V, Myers MW, Vasilakis C, Risk of idiopathic cardiovascular death and nonfatal venous thromboembolism in women using oral contraceptives with differing progestagen components. *Lancet* 1995 Dec 16; 346(8990):1589-93.

The results of this study show that women of childbearing age using combined oral

contraceptives have an almost 10-fold higher risk of dying from pulmonary embolism, compared to nonusers. The finding of a substantial increased risk of this fatal complication in users of oral contraceptives is especially important when considering that these deaths occur in healthy young women who would have otherwise had a long life expectancy ahead of them.

—Parkin L, Skegg DCG, Wilson M, Herbison GP, Paul C, Oral contraceptives and fatal pulmonary embolism. *Lancet* 2000; 355:2088,2133–2134.

The results of this study, a meta-analysis of 16 trials investigating the relationship between oral contraceptive use and ischemic stroke, show that users of oral contraceptives have a 2.75-fold higher risk of ischemic stroke, compared to nonusers. The risk increases with increasing doses of estrogens contained in the oral contraceptive, from a 2-fold increase in users of low-dose estrogen preparations, to a 4.5-fold increase in users of more than 50 micrograms of estrogen. This excess risk translates in 1 extra ischemic stroke per year for every 24,000 women using oral contraceptives. These data indicate that contrary to what was previously believed, users of lower-dose estrogens are not spared from the excess risk of stroke associated with oral contraceptives.

—Gillum LA, Mamidipudi SK, and Johnston SC, Ischemic stroke risk with oral contraceptives. A meta-analysis. *JAMA* 2000; 284:72-78.

The results of this study show that women aged 16-44 years using first, second, and third-generation oral contraceptives have a 4.4-, 3.4-, and 3.9-fold increased risk of developing ischaemic stroke, compared to nonusers.

—Heinemann LAJ, et al., Case-control study of oral contraceptives and risk of thromboembolic stroke: results from international study on oral contraceptives and health of young women. *BMJ* 1997; 315:1502-1504 (6 December).

The results of this study show that use of oral contraceptives is associated with a 3-fold increased risk of ischemic stroke in women aged 22-44 years. The presence of high blood pressure further increases the risk, and hypertensive women taking oral contraceptives were found to have an almost 11-fold increased risk of stroke in Europe and a 14.5-fold increased risk of stroke in Africa, Asia, or South America.

—Ischaemic stroke and combined oral contraceptives: results of an international, multicentre, case-control study. WHO Collaborative Study of Cardiovascular Disease and Steroid Hormone Contraception. *Lancet* 1996 Aug 24; 348(9026):498-505.

The results of this study show that use of oral contraceptives is associated with an over 2-fold increased risk of haemorrhagic stroke in women aged 35 years and older. Women with a history of hypertension using oral contraceptives have a 10- to 15-fold increased risk of hemorrhagic stroke, compared to women with neither risk factor,

while the risk increases by 3-folds in women who smoke and take oral contraceptives. The authors estimated that use of oral contraceptives is responsible for 13% and 8% of all strokes occurring among women aged 20-44 years in Europe and in the developing countries, respectively.

—Haemorrhagic stroke, overall stroke risk, and combined oral contraceptives: results of an international, multicentre, case-control study. WHO Collaborative Study of Cardiovascular Disease and Steroid Hormone Contraception. *Lancet*, 1996 Aug 24; 348(9026):505-10.

The results of this study show that women using oral contraceptives have a 4- to 5-fold increased risk of developing deep venous thrombosis and pulmonary embolism, compared to nonusers.

—Bloemenkamp KW, et al., Risk of venous thrombosis with use of current low-dose oral contraceptives is not explained by diagnostic suspicion and referral bias. *Arch Intern Med* 1999 Jan 11; 159(1):65-70.

This article reports on four epidemiological studies showing a 2-fold increased risk of deep venous thrombosis in women using third-generation oral contraceptives, compared to those using second-generation oral contraceptives. This effect seems associated to the development of resistance to the blood's own anticoagulation system observed in users of third-generation oral contraceptives.

—Vandenbroucke JP; Helmerhorst FM; Bloemenkamp KW; Rosendaal FR, Third-generation oral contraceptive and deep venous thrombosis: from epidemiologic controversy to new insight in coagulation. *Am J Obstet Gynecol* 1997 Oct; 177(4):887-91.

This review highlights that users of third-generation oral contraceptives containing the new progestins desogestrel, gestodene, and norgestimate, have a 2- to 5-fold increased incidence of deep venous thrombosis and pulmonary embolism, compared to users of the older, second-generation oral contraceptives. The mechanism underlying the increase in blood clot formation is thought to be the acquisition of resistance to the blood's own anticoagulation system.

—Weiss G, Risk of venous thromboembolism with third-generation oral contraceptives: a review. *Am J Obstet Gynecol* 1999 Feb; 180(2 Pt 2):295-301.

The results of this study show that women who use oral contraceptives have a 3-fold increased incidence of deep venous thrombosis and subsequent pulmonary embolism, compared to nonusers. The risk increases in users of oral contraceptives containing progestin of the third rather than second generation, and does not seem to be affected by duration of treatment.

—Venous thromboembolic disease and combined oral contraceptives: results of international multicentre case-control study. World Health Organization Collaborative

Study of Cardiovascular Disease and Steroid Hormone Contraception. *Lancet* 1995 Dec 16; 346(8990):1575-82.

The results of this study show that users of oral contraceptives containing the second-generation progestin levonorgestrel have a 3.4-fold increased risk of venous thromboembolism, compared to nonusers. Users of oral contraceptive containing the third-generation progestins desogestrel or gestodene have a 7- and 10-fold increased risk of venous thromboembolism, respectively, compared to nonusers. These data indicate that the risk of this complication is 2-3 times higher in women taking the new generation of oral contraceptives compared to those taking the older ones.

—Effect of different progestagens in low oestrogen oral contraceptives on venous thromboembolic disease. World Health Organization Collaborative Study of Cardiovascular Disease and Steroid Hormone Contraception. *Lancet* 1995 Dec 16; 346(8990):1582-8.

The results of this study show that women employing the newest form of low-dose oral contraceptives containing third-generation progestins are at significantly higher risk of developing deep venous thrombosis, compared to users of second- and first-generation contraceptives. In particular, women taking pills containing the progestin desogestrel (the only third-generation progestin available in the U.S.) combined to low dose (30 micrograms) ethinyloestradiol, had a 9-fold increased risk of deep venous thrombosis,

compared to nonusers. Women with inherited blood-clotting defects (with mutation in the gene coding for the blood clotting factor V –factor V Leiden mutation) who took desogestrel-containing pills had an almost 50-fold increased risk of deep venous thrombosis, compared to women with neither risk factor.

—Bloemenkamp KW, et al., Enhancement by factor V Leiden mutation of risk of deep-vein thrombosis associated with oral contraceptives containing a third-generation progestagen. *Lancet* 1995 Dec 16; 346(8990):1593-6.

Oral Contraceptives and Cancer

Research shows that women who use oral contraceptives face an increased risk of developing cancer of the uterine cervix, thyroid cancer, and liver cancer.

The results of this study show that women using oral contraceptives have an increased risk of developing invasive cancer of the uterine cervix, compared to nonusers. The risk increases with increased duration of use. The association between oral contraceptive use and cancer of the uterine cervix is particularly strong in women younger than 35 years.

—Thomas DB; Ray RM, Oral contraceptives and invasive adenocarcinomas and adenosquamous carcinomas of the uterine cervix. The World Health Organization Collaborative Study of Neoplasia and Steroid Contraceptives. *Am J Epidemiol* 1996

Aug 1; 144(3):281-9.

The results of this study show that women taking oral contraceptives have a 2.2-fold increased risk of developing cancer of the uterine cervix of the adenocarcinoma type, compared to nonusers.

—Brinton LA et al., Oral contraceptive use and risk of invasive cervical cancer. *Int J Epidemiol* 1990 Mar; 19(1):4-11.

This study investigated the effects of exogenous female hormones on thyroid cancer risk by analyzing 13 previous studies conducted on a total of 2,132 cases and 3,301 controls. Current use of oral contraceptives was associated with a 50% increased risk of thyroid cancer, and use of fertility drugs and lactation suppression drugs was associated with 60% and 50% increased risk of thyroid cancer, respectively.

—La Vecchia C, et al., A pooled analysis of case-control studies of thyroid cancer. III. Oral contraceptives, menopausal replacement therapy and other female hormones. *Cancer Causes Control* 1999 Apr; 10(2):157-66.

This letter emphasizes that the authors of a study conducted by Beral and colleagues and published in the British Medical Journal, failed to mention in the text of their article, the finding of a 5-fold increased incidence of liver cancer among users of oral

contraceptives, compared to nonusers. Of note, the elevation in risk persisted until at least 10 years after discontinuation of oral contraceptive use.

—Horowitz J, Relative risk of liver cancer remains high. Letter. *BMJ* 1999; 319:386 (7 August).

The results of this study show that women aged 20-44 years taking oral contraceptives have a 4-fold increased risk of dying from liver cancer, compared to nonusers. The risk of dying from liver cancer increases by 20 times in women with a history of use of oral contraceptives of 8 years and longer.

—Forman D, Vincent TJ, Doll R, Cancer of the liver and the use of oral contraceptives. *Br Med J* (Clin Res Ed) 1986 May 24; 292(6532):1357-61.

The results of this case-control study confirm previous findings indicating that use of oral contraceptives is associated with an increased risk of liver cancer. In particular, eight of nine (89%) women with hepatocellular carcinoma reported use of oral contraceptives, a percentage significantly higher than that found in matched controls (36%).

—Palmer JR, Rosenberg L, Kaufman DW, Warshauer ME, Stolley P, Shapiro S, Oral contraceptive use and liver cancer. *Am J Epidemiol* 1989 Nov; 130(5):878-82.

The results of this study show that users of oral contraceptives have a 25% increased risk of developing liver adenomas and a 2-fold increased risk of developing liver focal nodular hyperplasia, compared to nonusers.

—Heinemann LA, Weimann A, Gerken G, Thiel C, Schlaud M, DoMinh T, Modern oral contraceptive use and benign liver tumors: the German Benign Liver Tumor Case-Control Study. *Eur J Contracept Reprod Health Care* 1998 Dec; 3(4):194-200.

The results of this study show that use of oral contraceptives is associated with a 2-fold increased incidence of gestational trophoblastic tumors, compared to nonuse. The risk increases by 4-folds in women who become pregnant while taking oral contraceptives.

—Palmer JR, et al., Oral contraceptive use and risk of gestational trophoblastic tumors. *J Natl Cancer Inst* 1999 Apr 7; 91(7):635-40.

Oral Contraceptives: Miscellaneous

The health problems linked to oral contraceptives extend beyond cardiovascular disease and cancer. As these studies show, women who use oral contraceptives also face a higher risk of gallbladder disease, Crohn's disease (an inflammation of the small and/or large intestine), and Type 2 diabetes.

The results of this study, conducted on approximately 480,000 women, show that those aged 15 to 19 years taking oral contraceptives have a 3-fold increased risk of symptomatic gallbladder disease requiring medical treatment, compared to nonusers. The risk decreases with increasing age of use, down to a 20% higher risk in women aged 40-44 years.

—Strom BL, et al., Oral contraceptives and other risk factors for gallbladder disease. *Clin Pharmacol Ther* 1986 Mar; 39(3):335-41.

The results of this study show that use of oral contraceptives is associated with an overall 20% increased risk of gallbladder disease requiring medical treatment. Current users of oral contraceptives have a 60% increased risk of symptomatic gallbladder disease. The risk increases with increasing duration of treatment, and is 50% higher in women who took oral contraceptives for 10-14 years and 60% higher in those who took them for 15 or more years, compared to nonusers.

—Grodstein F, Colditz GA, Hunter DJ, Manson JE, Willett WC, Stampfer MJ, A prospective study of symptomatic gallstones in women: relation with oral contraceptives and other risk factors. *Obstet Gynecol* 1994 Aug; 84(2):207-14.

The results of this study indicate that the increase in use of oral contraceptives observed in women aged 22-28 during the years 1967-1976, has been responsible for the over 2-fold increase in rate of gallbladder removal recorded in those years.

—Evron S, Frankel M, Diamant Y, Biliary disease in young women and its association with pregnancy or oral contraceptives. *Int Surg* 1982 Oct-Dec; 67(4 Suppl):448-50.

The results of this study show that the risk of developing ulcerative colitis and Crohn's disease increases by 2- and 2.6-folds, respectively, in women who used oral contraceptives in the 6 months prior the onset of the disease, compared to nonusers. The risk of Crohn’s disease, but not that of ulcerative colitis, increases with increasing duration of oral contraceptive use, and women who took oral contraceptives for more than 6 years were shown to have a 5-fold increased risk of developing the disease, compared to nonusers.

—Boyko EJ, Theis MK, Vaughan TL, Nicol-Blades B, Increased risk of inflammatory bowel disease associated with oral contraceptive use. *Am J Epidemiol* 1994 Aug 1; 140(3):268-78.

The results of this study show that the risk of Crohn's disease increases by 2-fold in women who use oral contraceptives, compared to nonusers. Women who used oral contraceptives in the year before the onset of the disease had an over 4-fold increased risk of Crohn’s disease, and those who took them for 5 or more years before the onset of disease had a 8-fold increased risk, compared to nonusers.

—Lesko SM, et al., Evidence for an increased risk of Crohn's disease in oral

contraceptive users. *Gastroenterology* 1985 Nov; 89(5):1046-9.

The results of this study show that oral contraceptive use is associated with a 50% increased risk Crohn's disease. The combination of oral contraceptive use and smoking increases the risk of Crohn's disease by 2.6-folds.

—Sandler RS, Wurzelmann JI, Lyles CM, Oral contraceptive use and the risk of inflammatory bowel disease. *Epidemiology* 1992 Jul; 3(4):374-8.

The results of this study, conducted on over 98,000 women aged 25-42 and followed up for 4 years, show that users of oral contraceptives have a 60% increased risk of developing Type 2 diabetes, compared to nonusers. After adjusting for several confounders, use of oral contraceptives was found to be associated with a 30% increased risk of diabetes.

—Chasan-Taber L, et al., A prospective study of oral contraceptives and NIDDM among U.S. women. *Diabetes Care* 1997 Mar; 20(3):330-5.

Correspondence:

Gary Null, PhD

P.O. Box 918

Planetarium Station, NY 10024 USA

646-505-4660

Fax 212-472-5139

Email: precisemd@aol.com

References:

1. Null, Gary and Seaman, Barbara, *For Women Only! Your Guide to Health Empowermen*, Seven Stories Press, NY, 1999, p. 104.

2. Null, p. 103.

3. Null, p. 103.

4. Ahlgrimm, Marla, RPH, and Kells, John M, *The HRT Solution: Optimizing Your Hormone Potential*, Avery Publishing Group, NY, 1999, p. 54.

5. Null, p. 103.

6. Null, p. 103-104.

7. Null, p. 103.

8. Null, p. 103-104.

9. Beral V, et al., Mortality associated with oral contraceptive use: 25 year follow up of cohort of 46,000 women from Royal College of General Practitioners' oral contraception study. *BMJ* 1999; 318:96-100 (9 January).

10. Parkin L, Skegg DCG, Wilson M, Herbison GP, Paul C, Oral contraceptives and fatal pulmonary embolism. *Lancet* 2000; 355:2088,2133–2134.

11. Gillum LA, Mamidipudi SK, and Johnston SC, Ischemic stroke risk with oral contraceptives. A meta-analysis. *JAMA* 2000; 284:72-78.

12. Heinemann LAJ, et al., Case-control study of oral contraceptives and risk of thromboembolic stroke: results from international study on oral contraceptives and health of young women. *BMJ* 1997; 315:1502-1504 (6 December).

13. Ischaemic stroke and combined oral contraceptives: results of an international, multicentre, case-control study. WHO Collaborative Study of Cardiovascular Disease and Steroid Hormone Contraception. *Lancet* 1996 Aug 24; 348(9026):498-505.

14. Haemorrhagic stroke, overall stroke risk, and combined oral contraceptives: results of an international, multicentre, case-control study. WHO Collaborative Study of

Cardiovascular Disease and Steroid Hormone Contraception. *Lancet*, 1996 Aug 24; 348(9026):505-10.

15. Parkin L, Skegg DCG, Wilson M, Herbison GP, Paul C, Oral contraceptives and fatal pulmonary embolism. *Lancet* 2000; 355:2088,2133–2134.

16. Forman D, Vincent TJ, Doll R, Cancer of the liver and the use of oral contraceptives. *Br Med J* (Clin Res Ed) 1986 May 24; 292(6532):1357-61.

17. Null, p. 104.