**Birth Control Patch Users Need More Vitamin C**

The FDA has notified healthcare professionals and patients that Ortho Evra, a skin patch for birth control, may increase the risk for blood clots in the legs and lungs as well as other clotting problems such as strokes and heart attacks. The increased risk from the birth control patch is greater than taking a typical estrogen birth control pill. (FDA bulletin:) Readers of this blog may be surprised to learn that the birth control patch problem may be yet another indication for the need for vitamin C.


Earlier, in 1975, researchers determined that recommended intake levels of vitamin C are inadequate for women when hormone levels are high, such as during pregnancy or when receiving oral contraceptive steroids. [Annals New York Academy Science September 30;258: 465-82, 1975]

Then again in 1986 researchers examined the effect vitamin C and estrogen/progesterone among guinea pigs that are in the same predicament as humans – they don’t produce vitamin C like most other animals do. The provision of these hormones to the guinea pigs results in significantly lower concentrations of vitamin C in blood plasma, liver, adrenals and urine. To prevent deficiency, the animals received the human equivalent of 800-1600 milligrams of supplemental vitamin C per day. (Can you imagine, government health authorities say humans only need 60 milligrams of vitamin C a day, cannot benefit from taking any more than 200 milligrams per day, and could possibly overdose taking 2000 milligrams per day.) When the hormones were given without vitamin C the animals developed signs of scurvy and all of the animals died in 10 days.

Neither the manufacturer of the patch nor the FDA issues warnings to women taking oral contraceptives to take more vitamin C. Vitamin C deficiency weakens collagen in artery walls, causing them to collapse, and subsequently blood clots form which can travel to the lungs or brain, causing strokes or sudden death. How many women on supplemental hormones have died prematurely because modern medicine ignores vitamin C? -
Effects of estrogen and progestogen on the ascorbic acid status of female guinea pigs. Basu TK. Female, adult guinea pigs were fed a low ascorbic acid diet ad libitum. Oral administrations of either estinyl (5 micrograms) or progestogen (250 micrograms) in combination with 5 mg of ascorbic acid (minimum requirement) daily for 21 d, resulted in significantly lower (P less than 0.05) concentrations of ascorbic acid in plasma, liver, adrenals and urine than in animals receiving only 5 mg of the vitamin. None of these animals showed any clinical signs of ascorbic acid deficiency. Clinical manifestations of scurvy were exhibited, however, when animals receiving no ascorbic acid supplement were treated with the steroid hormones for 7 d. All of these animals died by d 10. On the other hand, the animals receiving neither ascorbic acid nor the steroids remained free from any signs of scurvy, except one (out of six), which died by d 12. In vitro studies revealed a markedly higher rate of oxidation of ascorbic acid in the presence of either estinyl or progestogen than in untreated controls. These results were further supported by a higher level of plasma ceruloplasmin in animals receiving a combination of estrogen and progestogen than in animals receiving no hormones. An in vivo dose-related effect of ascorbic acid indicated that the steroid-mediated lowering effect of the vitamin status could be counteracted by increasing the dose of ascorbic acid from 5 to 10 mg/d for 2 wk. These results suggest that the interactions between oral contraceptive hormones and ascorbic acid may be of clinical importance only in the case of borderline intake of the vitamin.

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Relationships of ascorbic acid to pregnancy, and oral contraceptive steroids. Rivers JM, Devine MM. The 1974 RDA is 60 mg per day for pregnant women and 80 mg per day for lactating women. In the present study an attempt was made to simulate this intake in the guinea pig and study reproduction performance in relation to guinea pigs fed chronically low and high levels. In animals that conceived and carried the young to term, all 3 dietary levels of ascorbic acid appeared to be adequate for maintaining viability of fetuses and of offspring, and for growth of offspring during the nursing period. The chronically low intake level was not adequate for growth after weaning. The control group was superior to the chronically low-intake group but inferior to the high-intake group in conceiving, producing litters, and carrying litters to term. The level of intake in the control group was inadequate to maintain tissue stores. Even the high intake was inadequate to maintain some tissues at saturation levels. The results suggest that the requirement for ascorbic acid during pregnancy and lactation has been markedly underestimated.


Effect of oral contraceptive agents on ascorbic acid metabolism in the rhesus monkey. Weininger J, King JC. Vitamin C, (aka ascorbic acid or AA) metabolism was studied in six sexually mature female rhesus monkeys with normal menstrual cycles before and during oral contraceptive administration. The animals were fed a commercial monkey stock diet (15% protein) containing no AA and given a 100 mg AA tablet daily throughout the study. After an initial adaptation period and a control period (total 8 months),
combined-type oral contraceptive agents (OCAs) (50 micrograms mestranol and 1 mg norethindrone for 21 days each month) were administered to each monkey for 4 months. Serum copper and ceruloplasmin were significantly elevated during OCA treatment. There were no significant changes in plasma or leukocyte AA values during OCA use; however, urinary AA excretion decreased significantly. During the last month of the control period and the 3rd month of OCA treatment, 50 µCi of 1-14C-L-ascorbic acid were injected intravenously into each monkey. Urinary excretion of radioactivity, measured for 1 month, indicated a significantly faster AA turnover rate during the period of OCA use. These results suggest that women using oral contraceptive agents may have an increased dietary requirement for ascorbic acid (vitamin C).