Noncontraceptive Health Benefits of the Oral Contraceptive Pill

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With over 17,000 articles published since 1966, the oral contraceptive pill is one of the most studied preventive health drugs. Recent studies have shown many important findings related to the noncontraceptive health benefits of the oral contraceptive pill including a reduction in ovarian cancer, endometrial cancer, pelvic inflammatory disease, breast disease, and acne.

Ovarian Cancer

Ovarian cancer is the most common cancer of the reproductive organs and is the fourth leading cause of death in women after cancer of the lung, breast, colon, and rectum. An estimated 27,000 cases of ovarian cancer are diagnosed each year, and 15,000 deaths occur yearly. Since ovarian cancer is difficult to detect and is generally advanced at the time of diagnosis, the 5-year survival rate is less than 45%.[1]

Recent studies have shown that the risk of ovarian cancer decreases significantly with use of the oral contraceptive pill. Risk reduction has been shown to be 40% after 4 years, 53% after 8 years, and 60% after 12 years of oral contraceptive use.[2] Protection has been shown to begin with 1 year of use and persists from 10 to 19 years after the pill is stopped.[3]

Endometrial Cancer

Although endometrial cancer is the lowest cause of death from pelvic cancer, it is the most commonly diagnosed. Among U.S. women, 34,000 cases are diagnosed each year and 6,000 deaths occur yearly. A recent analysis of 10 epidemiologic studies published between 1980 and 1994 found a significant decrease in endometrial cancer risk of 54% after 4 years, 66% after 8 years, and 72% after 12 years of oral contraceptive use.[3] Protection against endometrial cancer has been shown to begin with 1 year of use and persists for at least 20 years after stopping the oral contraceptive pill.[4]

Pelvic Inflammatory Disease

Pelvic inflammatory disease affects more than 1 million women annually in the United States.[5] Approximately 250,000 women develop more serious sequelae each year including tubal damage, chronic pelvic pain, ectopic pregnancy, and infertility.[6] In a hospital-based-controlled study, a lower risk of pelvic inflammatory disease was observed among women taking the oral contraceptive pill continuously for at least 12 months compared to nonusers. In this study a reduction of 60% in the rate of hospitalization for pelvic inflammatory disease was observed.[7]

Bone Mineral Density

Women taking oral contraceptive pills may derive protection against osteoporosis. Cross-sectional studies of postmenopausal women have documented that prior users of the oral contraceptive pill have greater bone density and that this protection increases with longer duration of use.[8] A 12% increase in bone mineral density was found in premenopausal women on the oral contraceptive pill compared with nonusers, with the greatest increase occuring in women who had used the pill for at least 10 years.[9] Osteoporosis has also shown to be less common and to occur later in women who have been on the oral contraceptive pill.[10]

Benign Breast Disease

Studies have shown that after 2 years of oral contraceptive use there was a reduction of 83% in the incidence of fibroadenomas and 53% in the incidence of fibrocystic disease.[11] Previous users were found to have a reduction of 65% in the incidence of fibroadenomas and 34% in the incidence of fibrocystic disease. Studies using the lower dose oral contraceptive pills have shown a similar decrease in the incidence of benign breast disease.[12]

Concern that the oral contraceptive pill might increase breast cancer continues to be prevalent among U.S. women. A recently-published reanalysis of nearly all of the epidemiologic data available on breast cancer risk and the use of oral contraception included data on 53,297 women with breast cancer and 100,239 controls in 25 countries[13] showed that the estimated cumulative risk of being diagnosed with breast cancer was not significantly different among women who had discontinued the oral contraceptive pill for more than 10 years compared with women who had never been on the pill.

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The data indicated that oral contraceptive use slightly increased the risk of breast cancer. Breast cancers diagnosed in women on the oral contraceptive pill were found to be localized compared to nonusers, and the survival rate in women on oral contraception was greater than in nonusers.

Rheumatoid Arthritis

Most studies have shown a decrease in rheumatoid arthritis among women on oral contraception. A recent case-controlled study reported a 60% reduction in the relative risk of rheumatoid arthritis in women on oral contraception with the greatest protection found in those with a family history of the disease.[14] A meta-analysis of the literature suggests that oral contraception might not be protective but may inhibit the disease's progression.[15]

Acne

Several studies have shown an improvement in acne in women on the oral contraceptive pill. Most recently an oral contraceptive pill was compared to a placebo to determine whether acne was improved in women on the pill.[16] Significant reductions in inflammatory acne lesions and total lesions were noted in women using the triphasic norgestimate/ethinyl estradiol (35 mcg) pill compared with women taking a placebo. These findings resulted in the Food and Drug Administration (FDA) relabeling the indications for the triphasic norgestimate/ethinyl estradiol pill to include treatment for acne. This represents the first time that the FDA has approved a noncontraceptive indication for an oral contraceptive pill. At a recent symposium, the authors of this study also presented data showing that women on this triphasic pill actually lost weight compared to women taking a placebo.[17]

Conclusion

The oral contraceptive pill has been extensively studied for more than 40 years, but only recently have studies been published showing an overall improvement in health in women on oral contraception. These health benefits are especially significant in older women since the FDA no longer has an upper age limit for discontinuation of the pill. The significance of the noncontraceptive benefits of the oral contraceptive pill, which include a significant reduction in ovarian cancer, endometrial cancer, pelvic inflammatory disease, benign breast disease, and acne, have led many researchers and physicians to advocate use of the pill even in women who do not need contraception.

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