Use of Continuous Combined Oral Contraceptives Demonstrates Bone Health Benefits

New study suggests benefits of combined oral contraceptives in preserving bone mineral density in women with premature ovarian insufficiency

CLEVELAND, Ohio (June 24, 2020)—Women with premature ovarian insufficiency (POI) become estrogen deficient at an early age, which makes them more vulnerable to the loss of bone mineral density. A new study suggests that use of continuous combined oral contraceptives may be especially effective in reducing bone mass loss. Study results are published online today in Menopause, the journal of The North American Menopause Society (NAMS).

Premature ovarian insufficiency occurs when a woman’s ovaries stop working before the age of 40. This results in estrogen deficiency well before the age of natural menopause, which leads to a number of potential problems, including not only hot flashes but also sexual dysfunction, mood disorders, and increased risk for cardiovascular disease and dementia. Bone mineral density is also affected, most notably in the lumbar spine. Bone mass typically continues to increase up to age 30, although 90% of peak bone mass is acquired by age 18. The lack of estrogen accelerates the loss of bone mass, which for women with POI is especially problematic because it begins at a much earlier age than average.

The condition is typically treated with the prolonged use of hormone therapy (HT) to provide the estrogen a woman normally would have produced and to minimize the effect of its early loss. Two types of hormones are most often used for treatment in women with POI—a postmenopause estrogen-based HT regimen or an estrogen-containing contraceptive, often taken orally in what is known as a combined oral contraceptive.

The benefits of combined oral contraceptives have been evaluated in previous studies but focused primarily on women with normal ovarian function. In this new study, researchers sought to evaluate the association between the use of continuous combined oral contraceptives and the bone mass variation in women with POI compared with the low-dose and high-dose HT regimens typically used for symptom management in menopausal women.

The study found that the use of continuous combined oral contraceptives is a viable option for HT in women with POI because it resulted in the least amount of bone mass loss, especially when measured at the lumbar spine. The bone effects with combined oral contraceptives were similar in women using high-dose HT regimens and superior to those seen in women on low-dose HT regimens.

Study results appear in the article “Bone mass in women with premature ovarian insufficiency: a comprehensive study between hormone therapy and combined oral contraceptives.”

“The results of this study support the use of combined oral contraceptives taken in a continuous fashion without a pill-free interval as an option for the treatment of women with POI—a regimen that may be particularly appealing for women who wish to avoid the chance of pregnancy. These results also show
similar bone protection with high-dose hormone therapy regimens but not with low-dose regimens, lending further credence to the recommendation to use hormone therapy doses aimed at achieving physiologic levels for a premenopausal woman,” says Dr. Stephanie Faubion, NAMS medical director.

The authors have prepared a video summary of this article that can be found at: https://cdn-links.lww.com/permalink/meno/a/meno_00_00_2020_03_10_kling_meno-d-19-00371_sdc1.mp4

For more information about menopause and healthy aging, visit www.menopause.org.

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Founded in 1989, The North American Menopause Society (NAMS) is North America’s leading nonprofit organization dedicated to promoting the health and quality of life of all women during midlife and beyond through an understanding of menopause and healthy aging. Its multidisciplinary membership of 2,000 leaders in the field—including clinical and basic science experts from medicine, nursing, sociology, psychology, nutrition, anthropology, epidemiology, pharmacy, and education—makes NAMS uniquely qualified to serve as the definitive resource for health professionals and the public for accurate, unbiased information about menopause and healthy aging. To learn more about NAMS, visit www.menopause.org.