IUD Birth Control May Treat Early-Stage Endometrial Cancer

IUDs were even more effective at preventing endometrial cancer in women with a precancerous condition.

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Women diagnosed with precancerous endometrial hyperplasia or early-stage endometrial cancer may benefit from the use of a hormonal intrauterine device (IUD), an implant that prevents pregnancy by releasing the contraceptive levonorgestrel. Endometrial cancer is a form of uterine cancer.

In a study of 165 women, oncologists determined that after six months of using the birth control method, the incidence of the precancerous condition dropped by 82%, and early-stage disease dropped by 43%.

Endometrial cancer is the most common gynecological cancer in the United States. It develops when cells on the inner lining of the uterus divide at an abnormally rapid rate.

Currently, the standard treatment for endometrial cancer is a hysterectomy, the surgical removal of the uterus. However, this surgery may be dangerous for women who have obesity or certain other health conditions that increase the risk of complications. Hysterectomy also immediately results in infertility, a concern for many women of childbearing age.

Between December 2012 and October 2019, lead study author Andreas Obermair, MD, a professor of gynecological oncology at the University of Queensland in Australia, and colleagues recruited 165 women with obesity to participate in the study. (Obesity is a major risk factor for endometrial cancer.) The women had either atypical endometrial hyperplasia (a precancerous condition of the endometrium) or Stage I endometrial cancer, which is cancer that is confined to the uterus.

Six months after the insertion of an IUD, 79 of the 96 participants with precancer (82%) and 30 of the 69 participants with Stage I cancer (43%) had a complete pathologic response, meaning they had no physical or biological signs or symptoms of the disease.

The greater effectiveness of IUDs for prevention rather than treatment was expected. “This difference in response rates is what previous studies with much smaller case numbers reported, and it is not surprising,” Obermair told the ASCO Post, a publication of the American Society of

Clinical Oncology. “As cells move from healthy to cancer, they lose capability to respond to levonorgestrel.”

Nevertheless, the significant response rate for women with Stage I cancer suggests that a hormonal IUD may be a viable alternative to surgery in certain cases. “I’m not suggesting that the standard treatment of endometrial cancer should shift from surgery to hormone IUD,” Obermair told U.S. News and World Report. “I’m only suggesting that a subgroup of women—those may be about 10%, 20% of women who are very poor surgical candidates—they should be offered an alternative.” These women would “either run a very high risk of dying as a consequence of this operation [a hysterectomy] or very severe complications from the procedure,” said Obermair.

The researchers also studied the efficacy of combining the hormonal IUD treatment with either metformin, a diabetes medication, or weight loss. They found that 27 of the 47 participants who had taken metformin (57%) and 31 of the 47 participants who had lost weight (67%) had a complete response.

Obermair added that since the study lasted only six months and endometrial cancer can recur, the participants were not necessarily cured of their disease.

To read the abstract, click here. For more on how birth control can offset gynecologic cancer risk, read “On Birth Control? Your Ovarian and Endometrial Cancer Risk Is Probably Reduced.” And for more on how weight loss can function as a cancer treatment, read “Weight Loss May Lower Obesity-Related Cancer Risk.”

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