

DES Daughters' Face Higher Breast-Cancer Risk

TUESDAY, Aug. 8, 2006 (HealthDay News) –
By Serena Gordon, HealthDay Reporter

Women whose mothers took DES, a synthetic estrogen, while pregnant have nearly double the risk of breast cancer.

That's the main finding of a study published in the August issue of *Cancer Epidemiology, Biomarkers and Prevention* that compared women exposed to DES in utero to a group of comparably aged women who weren't exposed to the excess hormone levels.

"Women who were exposed to DES have been wondering about this for a long time," said the study's lead author, Julie Palmer, a professor of epidemiology at Boston University's School of Public Health. "We found the risk of breast cancer was about two times as high in the exposed women compared to unexposed women among those 40 years and older."

Diethylstilbestrol (DES) was prescribed from 1938 through 1971 to prevent miscarriage and other pregnancy complications. During that time, as many as 10 million American women took DES during pregnancy, the U.S. Centers for Disease Control and Prevention estimates.

Although research published in 1953 refuted the notion that DES could prevent the loss of pregnancy or pregnancy difficulties, doctors still continued to prescribe the drug. In 1971, the U.S. Food and Drug Administration advised doctors to stop prescribing DES because it was linked to a rare form of vaginal and cervical cancer -- clear cell adenocarcinoma -- in daughters of women who took DES while pregnant. These women eventually came to be known collectively as "DES daughters," according to the CDC.

Besides the increased risk of clear cell adenocarcinoma, being a "DES daughter" also increases your risk of reproductive tract defects, such as a T-shaped uterus, infertility and pregnancy complications, such as ectopic pregnancy or pre-term birth, according to the CDC. Boys born to mothers who took DES may experience abnormal, though non-cancerous, growths on their testicles.

Previous research had suggested that prenatal hormone levels of DES may affect the risk of breast cancer later in life. And women who took DES have higher rates of breast cancer. So, the researchers behind the new study wanted to assess what the actual risk of breast cancer was for women exposed to DES in utero.

They recruited 4,817 women who had been exposed to DES in utero and 2,073 women born in the same time period, but who had not been exposed to the drug. The bulk of the women in both groups were born in the 1950s, and nearly all were white.

During 2001 to 2003, the women were sent questionnaires, and 102 women -- 76 in the DES-exposed group and 26 in the control group -- reported a diagnosis of breast cancer.

After compensating for other breast-cancer risk factors, the researchers found that women who were exposed to DES in utero had a 91 percent higher risk of breast cancer after age 40, and a three-fold increased risk of breast cancer after age 50, when compared to women not exposed to the drug.

"These women received a much higher exposure to synthetic estrogen than would normally be there during a regular pregnancy," said Palmer, who theorized that the extra estrogen spurs the development of additional breast stem cells, and because there are a greater number of breast stem cells, there's an increased risk of cancer.

Dr. Jay Brooks, chairman of hematology and oncology at the Ochsner Health System in Baton Rouge, La., said, "This is an interesting study that shows we still don't know all of the long-term effects on women who took DES and their female offspring."

"This is important, but should be kept in perspective," he added. "While it is an increased risk, it's along the same order of escalation of risk as having a family history of breast cancer or of not having a child by the age of 30."

Brooks said if women -- all women, whether exposed to DES or not -- wanted to decrease their risk of breast cancer, they should maintain a normal weight, or lose excess weight.

Palmer added that some research has shown that regular physical activity may be helpful in reducing your risk of breast cancer. Women who know they were exposed to DES in utero should carefully discuss the use of post-menopausal hormones with their doctor, she suggested. Palmer also noted that all women should have regular mammogram screenings to detect breast cancer in its earliest stages.

Depending on what additional risk factors a women exposed to DES may have, Brooks said women might want to discuss the potential risks and benefits of using the medications tamoxifen or raloxifene, because these drugs block the action of estrogen, which can fuel some breast tumors.