DES Action Voice
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DES Exposure Positively Associated With Paraovarian Cysts

"Risk of Benign Gynecologic Tumors in Relation to Prenatal Diethylstilbestrol Exposure," by Lauren A. Wise, ScD et al, Obstetrics & Gynecology (Green Journal), Vol. 105, No. 1, January 2005.

Reviewed by Kari Christianson

In this study the authors from the National Cancer Institute's DES Follow-Up Study working group report that prenatal DES exposure is associated with an increased risk of paraovarian cysts (noncancerous fluid-filled sacs adjacent to but not part of the ovary). There was no increased risk found for uterine leiomyomata (noncancerous fibroids) or ovarian cysts (noncancerous fluid-filled sacs of the ovaries).

". . . prenatal DES exposure was associated with an increased detection of paraovarian cysts derived from the müllerian or wolffian ducts, but the clinical significance of these cysts is unknown. Our results do not support the hypothesis that prenatal DES exposure increased risk of uterine leiomyomata or ovarian cysts."

Citing research from the DES exposed mouse model from twenty or more years ago in which animal studies suggested an increased incidence of epithelial tumors in the reproductive tract as background information for this study, NCI researchers investigated the association of prenatal DES exposure and the risk of benign gynecologic tumors in the daughters of women who were given the drug while pregnant.

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"Our findings for paraovarian cysts are consistent with animal studies showing that developing reproductive organs are a potential in utero target for the long-term toxic effects of DES."

Two of the cohorts from the collaborative follow-up study of DES exposed and unexposed women (DESAD and Dieckmann) were used. NCI researchers investigated self-reported paraovarian cysts, ovarian cysts and uterine leiomyomata, as reported in the 1994 and 1997 questionnaires to these groups. Three gynecologists, not made aware of the exposure status of the participants, reviewed all medical, surgical and pathology reports related to the responses.

"In the present study, we included all cysts that could be classified into the following histologic types of cysts: functional cyst (including follicular and corpus luteum cysts), cystadenoma (serious and mucinous) or simple cyst; endometrioma (chocolate cyst); benign cystic tertoma (dermoid cyst); or paraovarian cysts, defined to include hydatid, paratubal, or any type of cyst believed to originate from remnants of the most cephatic portion of the müllerian or wolffian ducts."

Only lesions 2 cm or larger were included to minimize the influence of detection bias by health care providers aware of the woman's DES exposure status. This study did not include women with polycystic ovarian disease (numerous cysts on the ovaries).

Additionally, a separate analysis was undertaken to investigate uterine leiomyomata and no association to prenatal DES exposure was found. A detailed description of all methods and analyses is included in the article, including the limitation of the design study to only benign tumors requiring surgery.

In acknowledging the limitations and potential bias of a self-reported study, no matter how thoroughly investigated or reviewed, the authors express concern that the results may be due to detection bias, in part because of greater surveillance of the DES exposed women. Nonetheless, this article offers important new information for DES Daughters and their health care providers.

As the authors point out, benign gynecologic tumors among all women are common in the US. The treatment for the type and size cysts discussed in this article is surgery, depending on symptoms of discomfort and pain the women have experienced, whether the women are DES exposed or not. A large portion of women with cysts may have no symptoms and need no treatment unless these tumors interfere with fertility.

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