



A Focus On Diethylstilbestrol

SPRING 2011 #128

DES Was Linked To Cancer Forty Years Ago

Important Historical Review of the DES Tragedy

“The Long-Term Effects of In Utero Exposures – The DES Story,” *The New England Journal of Medicine*, Annekathryn Goodman, et al., published at NEMJ.org, April 20, 2011.

Reviewed by Kari Christianson

The 40th anniversary of the Herbst article about the association of prenatal exposure to diethylstilbestrol with vaginal cancer was a milestone not just for the DES community, but also for *The New England Journal of Medicine* and the medical community. In this “Perspective” article, the authors offer a compelling synopsis of the still unfolding lessons to be learned from DES and how reproductive tract changes caused by DES have affected women, men and the practice of medicine.

The final four paragraphs of this article speak directly about our experiences as DES-exposed individuals:

“For the women who were exposed to DES in utero, it meant being subjected to the trauma of multiple pelvic examinations with colposcopy and repeated biopsies, as well as living with the fear of developing cancer. Small, T-shaped uteri and other uterotubal anomalies that made it impossible to accommodate a growing fetus caused many of these women to have miscarriages — which occurred at twice the rate found among their non-DES-exposed contemporaries. Some sons of women who were given DES have also been reported to have epididymal cysts, microphallus, cryptorchidism, or testicular hypoplasia. The enormous health care costs for this cohort and the disruptions to their lives cannot be fully measured; in some cases, these effects have been devastating.

“The lessons learned from the DES story are powerful. Endocrine disruptors may cause alterations in the reproductive tract that have severe consequences and form the basis of disease in adults decades later. Endocrine disruptors may come not only from ingested medicines, but

potentially also from the environment through food. It is very difficult to recognize a teratogenic consequence of a prenatal exposure when the malformation does not manifest until 20 years later.

“There continue to be unanswered questions about the cohort of DES-exposed offspring. Will they encounter other unique health problems as they age? A slight increase in the rate of breast cancer among DES-exposed women over 40 years of age has been reported, but there has been no increase in other gynecologic cancers. Are the children of DES-exposed people at higher risk for genetic changes and disease? Epigenetic changes have been seen in studies in animals. However, a 2008 study of third generation — the grandchildren of women who were given DES during pregnancy — did not uncover an increased risk in humans.

“Ultimately, the DES story humbles us. It serves as a reminder that though the narrow lens of today might reassure us that an intervention is safe, it is only with the wisdom of time that the full consequences of our actions are revealed.”

Thanks to The New England Journal of Medicine and these authors for recognizing 40 years of DES research and spotlighting our DES health concerns – past, present and future.