

No extra birth defect risk after cancer treatment: study - Tehran Times

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The radiation and chemotherapy given to young cancer patients don't seem to increase the risk that their own children will have birth defects years later, a U.S. and Canadian study said. Researchers, whose findings were published in the Journal of Clinical Oncology, said this was "reassuring" because some doctors have wondered if the powerful drugs and radiation -- especially radiation directed near the ovaries or testicles -- might have long-term effects on the DNA of egg and sperm cells.

There is already evidence the treatments can affect a growing girl's uterus, for example, in ways that can cause other pregnancy problems.

"A lot of children are rendered infertile from strong treatments. We know now that depending on the types of treatment they received, they have higher rates of miscarriage (and) higher rates of low birthweight," said study author Lisa Signorello, from the International Epidemiology Institute in Rockville, Maryland.

"As a cancer survivor, the worries extend to the health of your children in many ways."

For the study, researchers followed close to 2,800 childhood cancer survivors in the United States and Canada, giving them regular surveys into adulthood that included questions about pregnancies and births.

Signorello and her colleagues recorded all instances of birth defects in the next generation, and compared the chance of having a baby with a birth defect to the dose of radiation or chemotherapy drugs the cancer survivors had received.

Out of 4,700 babies born to survivors at least five years after they finished treatment, 129 -- just under 3 percent -- had at least one birth defect, including cleft lip and palate, Down syndrome and heart and blood vessel defects.

Among the babies of women who'd survived childhood cancer, those rates were 3 percent after chemo and radiation compared to 3.5 percent when mothers hadn't had those treatments. They were 1.9 percent and 1.7 percent, respectively, in babies born to fathers who'd had cancer.

The dose of the drugs did not appear to have an impact. Higher doses of chemotherapy drugs or radiation to areas around the testicles and ovaries, such as for treatment of kidney cancer, weren't linked to a greater chance of birth defects than low doses.

About 3 percent of U.S. babies have a birth defect, Signorello and her colleagues wrote.

Their study did not include birth defects that were definitively linked to family history, and the study did not have a control group of parents who had never had cancer.

"These kinds of studies are very important in terms of counseling for children who have cancer and go through these treatments," said Anna Chiarelli, a senior scientist at Cancer Care Ontario in Toronto, who has studied pregnancy outcomes after childhood cancer treatment.

"There has always been that concern, what effect it will have, because of course the child is in a developing stage."

Though previous studies also have not found any extra birth defect risk after cancer treatment, Signorello said the size of their study, and the fact that her team had access to medical records with information on cancer treatment, make the findings more conclusive -- and Chiarelli agreed.

"This is a very significant study. I think it has gone further than the other ones," she said.

(SOURCE: Reuters)□