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Radiation risk of ovarian cancer in atomic bomb survivors: 1958–2009

Evidence for association between radiation exposure and ovarian cancer is limited. This study assessed radiation risk for total ovarian cancer and the cancer's tumor types between 1958 and 2009 among 62,534 female atomic bomb survivors in the Life Span Study* group, adding 11 years of follow-up from the last report using specialized statistical analysis.

As a result, there was a suggestion that the risk of total ovarian cancer increases with dose, and that radiation effects differ by tumor type. No significant trends in radiation risk were observed with time since exposure or age at exposure. Further follow-up will help to more accurately characterize the patterns of radiation risk for total ovarian cancer and its various types.

* Life Span Study:

The main purpose is to investigate the long-term effects of atomic bomb radiation on the cause of death and cancer incidence. At the time of the 1950 national population census in Japan, about 94,000 atomic bomb survivors were selected from among those who were confirmed to be in Hiroshima and/or Nagasaki at the time of the atomic bombings and about 27,000 who were not in city at the time. This study has tracked about 120,000 subjects.

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