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STANFORD UNIVERSITY SCHOOL OF MEDICINE  
Department of Genetics

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Dear Irene--

It was thrust on me to talk to the Am. Soc. Anesthesiologists the other day, and under that compulsion I reviewed the literature and my own memory about c-mitotic effects of anesthetics: which are rife. (See Andersen, Acta Anesth. Scand., Suppl. 22 1966)

Then I recalled your paper in Lancet (11/16/68) and I wondered if the effects you have described, of chromosome aberrations subsequent to abdominal radiation, could not be ascribed just as well to general anesthesia.

I toyed with the idea of writing a brief letter to Lancet to encourage the collection of the appropriate data; but I wonder if you could not try to sort out your own series on this point. I do assume there is a high correlation between radiology and anesthesia, but if, for example, one did a parallel control with, say, radiation of the ~~anterior~~ superior half of the body, one should be able to factor out ~~anterior~~ abdominal/pelvic dosage from the other entanglements.

Certainly I do not mean to belittle the idea of radiation-induced chromosome ~~loss~~ non-disjunction. What was the roentgen-efficiency for chromosome loss in Russell's studies in mice?

Sincerely,

*Joshua Lederberg*  
Joshua Lederberg

I.  
UCHIDA