

Letters to Editor

June 25, 1971

June 28, 1971

Sir:

I comment on the paper by Keith and Brown entitled, "Epidemiologic Study of Leukemia in Twins," which appeared in Vol. 20, No. 1, pp. 9-22 of this journal.

On page 16 the authors state, "We hesitate to draw conclusions from these compilations. Cases of concordance of any neoplasm in twins are reported more frequently than are discordant cases." I agree with this statement by the authors and regret that they chose to disregard it when they wrote their summary. They state, in their summary, "... most cases occurred in MZ twins..." and "Concordance was clearly highest in MZ twins of the perinatal period." Their statements would have been less misleading if they had said that, "In the published literature, most cases etc."

For reasons unclear from their paper, they chose to ignore the 9 sets of twins, 3 MZ and 6 DZ, reported by Steinberg (1960), although they refer to the paper. These 9 sets of twins (none showing concordance after a period of at least six years had elapsed since the onset of the disease in the affected twins) were collected in sequence without any selection. I point out that the MZ: DZ ratio is 1 : 2, i.e., approximately that in the general population, whereas the MZ : DZ ratio in the paper by Keith and Brown is 39 : 11 or 3 : 1.

Except for the statement on page 16, quoted above, the authors make no comments on this peculiar ratio.

Clearly, no conclusions concerning the prevalence of concordance or discordance may be drawn from their data. The data reflect the predilection for investigators to publish certain kinds of cases and nothing more. Their unwarranted conclusion, as stated in their summary, can cause unnecessary alarm to parents of twins with one of them leukemic.

Sincerely yours,

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Sir:

I should like to reply to the letter of Professor A. G. Steinberg.

We were fully aware of his paper, but stated that the reasons for not including it in our tables was the fact that there was not enough clinical information given to make an evaluation other than to say that there were nine discordant sets of twins.

Unfortunately, papers such as the excellent survey made by Professor Steinberg (1960) are not useful in all circumstances, especially if one is interested in clinical details. Some of Miller's work (1967) and the monumental paper of Guasch (1954) fall into the same category.

The finding of large numbers of discordant pairs of twins would certainly reflect upon the validity of our hypothesis. I am presently re-reviewing this problem and will comment more extensively on the Steinberg paper.

Unfortunately, whether one is speaking of the discordant or concordant pairs, all papers suffer from the inability to locate all of the cases in order to have a complete population for study.

Sincerely,

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References

- STEINBERG A. G. (1960). Genetics of acute leukemia in children. *Cancer*, **13**: 985.
MILLER R. W. (1967). Persons with exceptionally high risk of leukemia. *Cancer Res.*, **27**: 2420.
GUASCH J. (1954). Hérédité des léucémies. *Sang*, **25**: 384.