To the Editor:

We have recently reported in BLOOD an association of partial deletion of the long arm of chromosome 16 and bone marrow eosinophilia in a subgroup of patients with acute nonlymphocytic leukemia (ANLL). Following our discussion of this association with Dr. Janet Rowley, her group reviewed their material and found a pericentric inversion of chromosome 16 and marrow eosinophilia in eleven patients with acute myelomonocytic leukemia. The cytologic and clinical features of their cases were the same as ours, although the precise cytogenetic abnormality appeared to be different.

In the light of their findings, we re-reviewed all of our photokaryotypes and also went back to the original microscope slides to find additional abnormal metaphases. We feel that our patients 1, 2, 4, and 5 do indeed have a del(16)(q22), as originally reported, but that patient 3 should be reclassified as having a pericentric inversion, inv(16)(p13q22). In addition, we have found an inv(16)(p13q22) as the sole karyotypic abnormality in two more patients recently diagnosed with ANLL and marrow eosinophilia (Fig. 1).

Thus, it appears that either a deletion or a pericentric inversion of one chromosome 16 may be found among patients with this unique subtype of ANLL. The abnormality that is common to all is a break in band q22 on chromosome 16. These data suggest that loss or rearrangement of the genetic material in this region may be important in the etiology of this leukemia.

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Fig. 1. (Top) Diagrammatic representation of the del(16)(q22) and G-banded metaphase chromosomes from patients 1 (a) and 2 (b) from our paper showing this abnormality. (Bottom) Diagrammatic representation of the inv(16)(p13q22) and G-banded chromosomes from patient 3 (c) and one of the newly diagnosed patients (d) who had this inversion.

REFERENCES

Association of partial deletion of the long arm of chromosome 16 and bone marrow eosinophilia in acute non-lymphocytic leukemia [letter]

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