Commentary

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Translocation t(1;19)(q21;q13) in acute lymphoblastic leukemia

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In a series of patients with acute lymphoblastic leukemia (ALL) reported by Kaneko et al (1982), a 3-year-old girl with non-B, non-T ALL presented a reciprocal exchange t(1;19)(q21;q13) at both diagnosis and relapse. She was the only case with this translocation among the 330 ALL patients included in the Third Workshop on Chromosomes in Leukemia (Rowley, personal communication, 1982).

We detected the same translocation in a 22-month-old boy suffering from non-B, non-T ALL "high risk". At diagnosis the karyotype was 46, XY/47, XY,

— F, +2C; at relapse, the karyotype was 47, XY, +8,

- 19, +t(1;19)(q21;q13), inv(5)(q13q35). In this case, the translocation t(1;19) was the result of a partialtrisomy of chromosome 1.

Carroll et al (1983) have presented data on 60 ALL children; they found a t(1;19)(q23;q13) in 4 of 18

patients (22%) with pre-B cell ALL and in none of 42 other cases with "null", B-cell or T-cell ALL. All four patients had a poor prognosis and soon failed to respond to treatment.

Our patient was not typed for pre-B cell ALL, but the prognosis was poor and he died 4 yr after the onset of the disease. On the basis of the cases mentioned here we suggest that the

translocation t(1;19) is associated with a subgroup of ALL patients having a poor prognosis.

Carroll, A.J.; Crist, W.M.; Parmley, R.T.; Roper, M., and Finley, W.H.: Pre-B cell acute lymphocytic leukemia and chromosome translocation 1;19. Amer. J. hum. Genet. 35: 60A (1983).