Leukaemia Section
Short Communication

ins(5;11)(q31;q13q23)

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Clinics and pathology

Disease
Acute lymphoblastic leukemia (ALL).

Phenotype/cell stem origin
CD19+

Epidemiology
Poorly defined: only 1 case to date.

Clinics
A girl aged 4 months, who entered complete remission, relapsed and died 20 months after diagnosis.

Prognosis
Yet unknown, likely to be poor.

Cytogenetics

Additional anomalies
i(17q)

Variants
A few cases of t(5;11)(q31;q23) have been described, but it is unknown if they involve the same genes.

Genes involved and proteins

AF5q31
Location
5q31.1

Protein
Present homologies with AF4.

MLL
Location
11q23

DNA/RNA
13-15 kb mRNA.

Protein
431 kDa; contains two DNA binding motifs (a AT hook, and Zinc fingers), a DNA methyl transferase motif, a bromodomain; transcriptional regulatory factor; nuclear localisation.

Result of the chromosomal anomaly

Hybrid gene
Description
5' MLL - 3' AF5q31; fusion at MLL exon 10.

References

Taki T, Kano H, Taniwaki M, Sako M, Yanagisawa M, Hayashi Y. AF5q31, a newly identified AF4-related gene, is fused to MLL in infant acute lymphoblastic leukemia with ins(5;11)(q31;q13q23). Proc Natl Acad Sci U S A. 1999 Dec 7;96(25):14535-40

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