t(1;11)(q23;p15)

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Clinics and pathology

Disease
Acute non lymphocytic leukemia (ANLL), M2-ANLL type; this leukemia case is likely to be treatment related (see below).

Epidemiology
Only 1 case to date, a 55 year old male patient who has had a non Hodgkin lymphoma (NHL) with t(14;18)(q32;q21) 3 years before onset of the ANLL.

Evolution
Complete remission of the ANLL was achieved, but the NHL relapsed and an advanced gastric carcinoma was found and the patient died shortly afterwards.

Results of the chromosomal anomaly

Hybrid gene
Description
In frame fusion of NUP98 to PRRX1 exon 2; no reciprocal fusion transcript.

Fusion protein
Description
The chimeric protein contains the N-term half of NUP98, including the docking site to the homeodomain of PRRX1.

Oncogenesis
The PRRX1 homeodomain may be upregulated.

Genes involved and Proteins

Note: This translocation appears to be closely related to other translocations involving NUP98 and an homeodomain bearing protein, i.e. the t(2;11)(q31;p15), with HOXD13 or with HOXD11 involvement, the t(7;11)(p15;p15), with HOXA9 or with HOXA13 involvement, the t(9;11)(q34;p15), with PRRX2 involvement, and the t(11;12)(p15;q13) with HOXC11 or with HOXC13 involvement.

PRRX1
Location: 1q23

Protein
Protein with a homeodomain.

References


This article should be referenced as such: