

t(18;21)(q21;q22)

Clinics and Pathology

Disease acute non lymphocytic leukemia (ANLL) secondary to toxic exposure

Note only one case, but with features identical to 2 other cases: one case of [t\(1;21\)\(p36;q22\)](#), and one case of [t\(19;21\)\(q13.4;q22\)](#)

Phenotype /
cell stem
origin M2-ANLL

Etiology about 50 years after radiation exposure from nuclear explosion

Clinics pancytopenia preceeded leukemia

Evolution complete remission was obtained and the patient returned to the previous pancytopenia; subsequent relapse occurred

Genes involved and Proteins

Note the gene involved in 18q21 is unknown

Gene Name [AML1](#)

Location 21q22

Dna / Rna transcription is from telomere to centromere

Protein contains a Runt domain and, in the C-term, a transactivation domain; forms heterodimers; widely expressed; nuclear localisation; transcription factor (activator) for various hematopoietic-specific genes

External links

Other database [t\(18;21\)\(q21;q22\)](#) [Mitelman database \(CGAP - NCBI\)](#)

Other database [t\(18;21\)\(q21;q22\)](#) [CancerChromosomes \(NCBI\)](#)

To be noted

Additional cases are needed to delineate the epidemiology of this rare entity:

you are welcome to submit a paper to our new [Case Report section](#).

Bibliography

Cloning of an AML1 translocation in a novel syndrome of radiation-induced acute myeloid leukemia.

Hromas RA, Busse TM, Shopnick R, Jumean H, Bowers C, Richkind K.
Blood 1999; 94 suppl 1: Abst 3056.

Contributor(s)

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URL : <http://AtlasGeneticsOncology.org/Anomalies/t1821ID1187.html>

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