Leukaemia Section
Mini Review

t(6;11)(q27;q23)
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Identity

![G-banding image](image)

Identity

Disease
ANLL

Phenotype / cell stem origin
M4, M5 mostly; T-cell ALL at times; therapy related AL.

Epidemiology
Still poorly known; found in children and young adults; male predominance.

Clinics
Frequent infections; organomegaly; blood data: moderate WBC.

Clinics and pathology

- ANLL
- M4, M5 mostly; T-cell ALL at times; therapy related AL.

Epidemiology
Still poorly known; found in children and young adults; male predominance.

Clinics
Frequent infections; organomegaly; blood data: moderate WBC.
Treatment
BMT is indicated.

Prognosis
Very poor (as in other 11q23 rearrangements); rare remission; short survival.

Cytogenetics

Cytogenetics, morphological
May be misinterpreted as a del(11q), as chromosome 6 involvement may be overlooked.

Cytogenetics, molecular
Therefore, FISH may be needed.

Additional anomalies
Are present in most cases; +8 in particular; +3; +19; +21.

Genes involved and Proteins

AF6
Location: 6q27
Protein
Contains a GLGF motif; widely expressed; cytoplasmic localisation; role in signal transduction.

MLL
Location: 11q23
Protein
431 kDa; contains two DNA binding motifs (a AT hook and Zinc fingers), and a DNA methyl transferase motif; wide expression; nuclear localisation; transcriptional regulatory factor.

Results of the chromosomal anomaly

Hybrid gene
Description
5’ MLL - 3’ AF6

Fusion protein
Description
About 1400 NH2-term amino acids (with the AT hook and DNA binding motifs) from MLL and most of AF6, starting at amino acid 26.

References


This article should be referenced as such: