Leukaemia Section
Short Communication

**t(17;21)(q11.2;q22)**

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**Clinics and pathology**

**Disease**

Acute non lymphoblastic leukemia (ANLL) and myelodysplastic syndromes (MDS); de novo ANLL and treatment related leukemias (t-ANLL).

**Phenotype/cell stem origin**

One M2, one treatment related RAEBt/M4, one t-ANLL.

**Etiology**

Two cases are secondary to treatment with topoisomerase II inhibitors for Hodgkin disease and neuroblastoma.

**Epidemiology**

3 cases to date; 1M/2F, aged 2yrs, 39 yrs and 76 yrs.

**Prognosis**

Unknown.

**Cytogenetics**

**Additional anomalies**

Sole anomaly in one case; one case was also -7, +8, one case showed also a t(11;12)(p15;q13) with NUP98 rearrangement.

**Genes involved and proteins**

**Note**

The gene involved in 17q11 is unknown; the breakpoint on chromosome 17 is between the loci for NF1 and RARA.

**AML1**

**Location**

21q22

**DNA/RNA**

Transcription is from telomere to centromere.

**Result of the chromosomal anomaly**

**Hybrid gene**

**Description**

5 prime AML1-3 prime unknown; breakpoint in intron 5 or 6 of AML1.

**Fusion protein**

**Description**

The N-term is provided by AML1, as in the t(3;21) and in the t(8;21) associated with ANLLs, whereas, in the ALL with t(12;21), the fusion protein comprises the C-term part of AML1.

**References**


This article should be referenced as such: