Leukaemia Section
Short Communication

**t(3;5)(q21;q31)**

Jean-Loup Huret

Genetics, Dept Medical Information, University of Poitiers, CHU Poitiers Hospital, F-86021 Poitiers, France (JLH)

Published in Atlas Database: September 2013

Online updated version: [http://AtlasGeneticsOncology.org/Anomalies/t0305q21q31ID1110.html](http://AtlasGeneticsOncology.org/Anomalies/t0305q21q31ID1110.html)

DOI: 10.4267/2042/53490

This article is an update of:

*t(3;5)(q21;q31)/ANLL (AML; ---; not rare)*. Atlas Genet Cytogenet Oncol Haematol

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**Abstract**

Review on t(3;5)(q21;q31), with data on clinics, and the genes implicated.

**Clinics and pathology**

**Disease**

Acute myeloid leukemia (AML), myelodysplastic syndrome (MDS), and myeloproliferative disorder (MPD)

**Note**

26 cases of t(3;5)(q21;q31) in myeloid malignancy are available (Oshimura et al., 1976; Dewald, 1984; Bitter et al., 1985; Testa et al., 1985; Werner-Favre et al., 1985; Pi and Kalousek, 1986; Smadja et al., 1986; McCarthy et al., 1987; Sharp et al., 1987; Akiyoshi et al., 1991; Katz et al., 1992; Solé et al., 1992; Secker-Walker et al., 1995; Wong and Kwong, 1995; Groupe Français de Cytogénétique HématoLOGique, 1996; Dong et al., 1998; Mazzella et al., 1998; Misawa et al., 1998; Green et al., 1999; Berger et al., 2006; Lugthart et al., 2010). We have excluded from this review a case of acute lymphoblastic leukemia (Chen et al., 1992).

**Phenotype/cell stem origin**

There was 5 M6-AMLs, 2 M4-AMLs, 10 M2-AMLs, and 6 AMLs not otherwise specified (AML-NOS), 1 myeloid metaplasia with myelofibrosis (MMM) in acute phase, another myeloproliferative syndrome not otherwise specified, and a refractory anemia with excess of blasts in transformation (RAEB-t).

There was no reference with a previous toxic exposure.

**Epidemiology**

Median age was 36-38 years (range 3-85, with two pediatric cases aged 3); sex ratio was 11M/14F.

**Prognosis**

Data on survival is very scarce (patients alive at 3 months, 21 months, 29 months, and 30 months; and patients dead at 7 and 9 months).

**Cytogenetics**

**Cytogenetics morphological**

The t(3;5)(q21;q31) was the sole anomaly in 20 of 25 cases.

Complex karyotypes were present in 3 cases. A del(5q)/-5 was found in one case, a del(7q)/-7 was found in two cases, and a +8 in two cases.

**Genes involved and proteins**

**Note**

The genes involved in this translocation remain unknown.
t(3;5)(q21;q31). G- banding (left) - top three: Courtesy Christine Perot; bottom: Courtesy Francine Mugneret; and R- banding (right) - top three: Courtesy Christine Perot; bottom three: Courtesy Francine Mugneret.

References


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This article should be referenced as such: