**Leukaemia Section**

**Short Communication**

### t(4;12)(q21;p13)

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### Abstract

Review on t(4;12)(q21;p13) in lymphoid malignancies

**Keywords**

Chromosome 4; Chromosome 12; Acute lymphoblastic leukemia; Primary mediastinal large B-cell lymphoma; Adult T-cell leukemia/lymphoma; Acute megakaryoblastic leukemia.

![Partial karyotype with t(4;12)(q21;p13) in a female patient with B-ALL (table 1, #8).](image)

**Figure 1.** Partial karyotype with t(4;12)(q21;p13) in a female patient with B-ALL (table 1, #8).

### Clinics and pathology

**Disease**

Translocation t(4;12)(q21;p13) occurs predominantly in B-cell lymphoid disorders, including ALL, NHL, rarely with T-ALL and AML.

**Acute lymphoblastic leukemia (ALL):** was diagnosed in 5 patients (Groupe Franais de Cytogntique Hmatologique, 1993; Behm et al., 1996; Elghezal et al., 2001; Gindina T., own case, table 1, #8).

**Primary mediastinal large-B-cell lymphoma** was found in 1 patient (Palanisamy et al, 2002)

**Adult T-cell Leukemia:** 1 patient (Sadamori et al., 1991).

**Non-Hodgkins lymphoma:** 1 patient (Schouten et al., 1990).

**Acute myeloid leukemia:** 1 patient with AML-M7 (Ohyashiki et al., 1984).

**Phenotype/cell stem origin**

Two patients had B-cell Early B ALL (CD10+) and Pre-B ALL (Clg +) (Groupe Franais de Cytogntique Hmatologique, 1993).

**Epidemiology**

The translocation t(4;12)(q21;p13) was found in adults and children as well as equally among male and female patients.

### Genetics

Genes implicated in this translocation remain unknown.
Most likely, the translocation t(4;12)(q21;p13) is a secondary genetic event in oncogenesis.

### References


Schouten HC, Sanger WG, Weisenburger DD, Armitage JO. Abnormalities involving chromosome 6 in newly diagnosed patients with non-Hodgkin's lymphoma Nebraska Lymphoma Study Group Cancer Genet Cytogenet

This article should be referenced as such: