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Leukaemia Section

Short Communication

t(18;21)(p11;q11)

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Abstract

Chromosome translocation between the short arm of chromosome 18 and the long arm of chromosome 21 including the t(18;21)(p11;q11) is a rare event, reported only in sporadic cases.

KEYWORDS
Chromosome 18; Chromosome 21; Acute erythroleukemia; AML-M6; Acute lymphoblastic leukemia; Follicular lymphoma.

Clinics and pathology

Disease

Acute erythroleukemia (FAB type M6), acute lymphoblastic leukemia (ALL) and follicular lymphoma

Epidemiology

Only 3 cases to date: a 71-years old male diagnosed with acute erythroleukemia (Cigudosa et al., 2003), a female patient with follicular lymphoma (Lestou et al., 2003) and a 27-years old male with B-cell ALL (present case, personal observation).

Prognosis

Unknown (sporadic cases described). The ALL patient relapsed after 7 months of therapy and was alive in the last follow-up 2 years from the diagnosis.

Cytogenetics

Note
Breakpoints on 18p and 21q are difficult to ascertain in suboptimal preparations.

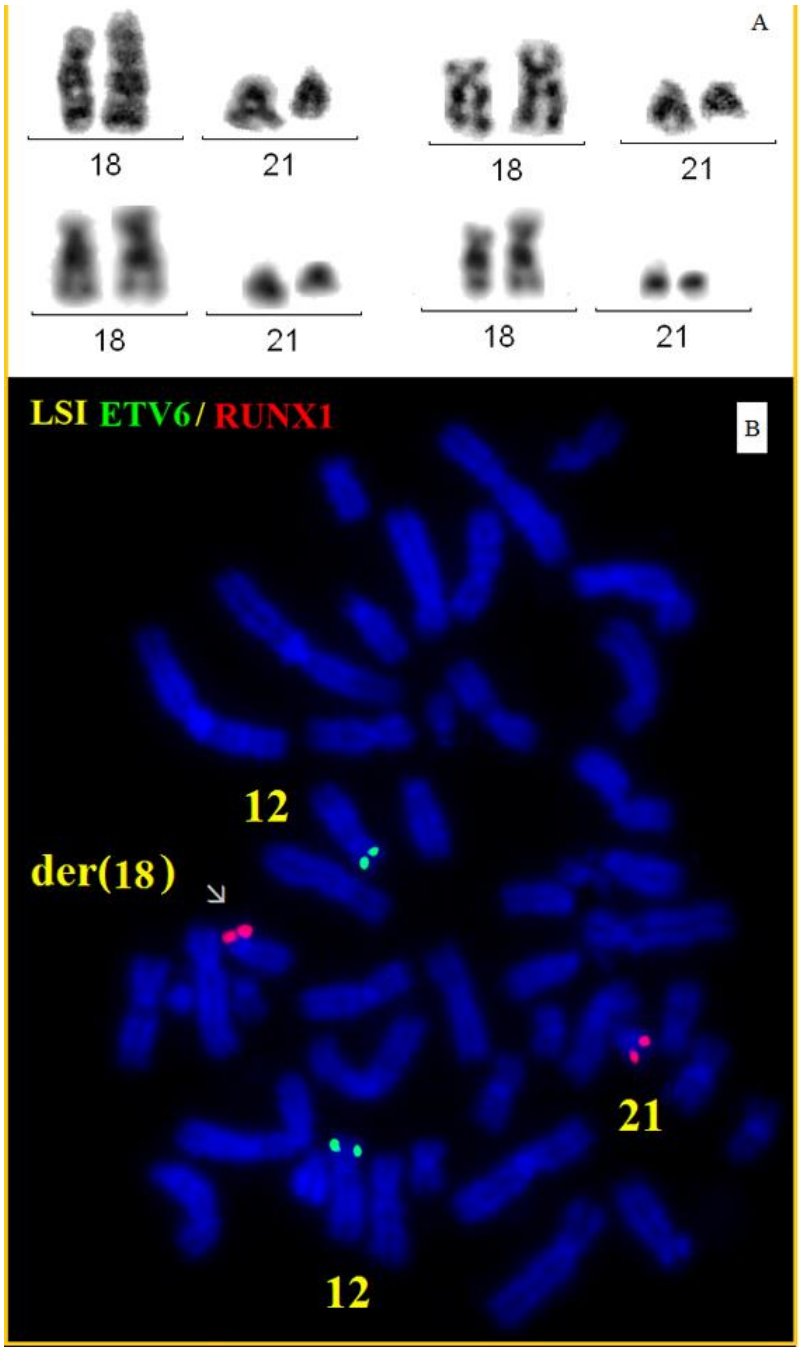
Additional anomalies

Associated with del(5)(q13q31) del(5)(q13q31), monosomy 7, hsr and complex karyotype in the AML case (Cigadusa et al., 2003), del(5)(q15q31), +7, t(14;18)(q32;q21) in the lymphoma case (Lestou et al., 2003) and with homozygous 9p deletion (70% of cells), detected by fluorescence in situ hybridization in the present case.

Variants

Genes involved are unknown.

t(18;21)(p11;q11)



Partial karyotypes with t(18;21)(p11;q11) (A). Fluorescence in situ hybridization with LSI TEL-AML1 probe (Vysis/Abott Molecular, US) probe showing relocation of AML1 (RUNX1) sequences from 21q22 to the short arm of chromosome 18 (B).

References

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