Abstract

Review on der(8;17)(q10;q10), with data on clinics.

Keywords
Chromosome 8; chromosome 17; TP53 deletion; Chronic lymphocytic leukemia; B-prolymphocytic leukemia; Waldenstrom macroglobulinemia; Acute myeloblastic leukemia.

Epidemiology

Lymphoid and myeloid malignancies. All lymphoid cases were B Lineage. There were 5 cases of chronic lymphocytic leukemia (CLL) (Döhner et al., 1995; Geisler et al., 1997; Adeyinka et al., 2007; Tang et al., 2013), 1 case of B-prolymphocytic leukemia (Schlette et al., 2001), and 1 case of Waldenstrom macroglobulinemia (Wong 2003). There were also 2 myeloid cases; one acute myeloblastic leukemia without maturation (M1-AML) and one acute myeloblastic leukemia with maturation (M2-AML) (respectively Kim et al., 2001 and Mrózek et al., 2002).

Note

der(8;17)(q10;q10) is also a recurrent abnormality in adenocarcinoma of the large intestine.

Cytogenetics

Note

A der(8;17)(q10;q10) is an unbalanced translocation, with 8p and 17 deletions.

Cytogenetics morphological

The der(8;17)(q10;q10) was the sole abnormality in 2 CLL cases, and the sole abnormality within a sideline in the Waldenstrom case (an i(17q) was found in another subclone). A t(14;18)(q32;q21) was present in 2 CLL cases; +12, del(13q), and a complex karyotype were found in 1 CLL case each. The B-prolymphocytic leukemia also had del(7q), del(11q). The 2 AMLs had a del(5q), and a complex karyotype, the M1-AML also presented with del(3p), and the M2-AML with t(10;16)(q22;p13) KAT6B/CREBBP, +19.

Result of the chromosomal anomaly

Fusion protein

Oncogenesis

Genes implicated in oncogenesis in these cases are unknown. Nevertheless it should be noted that the chromosome abnormality results in TP53 deletion.
References


This article should be referenced as such: