

t(2;17)(p23;q23)

Clinics and Pathology

Disease Anaplastic large cell lymphoma: translocations involving 2p23 are found in more than half cases of [anaplastic large cell lymphoma](#) (ALCL), a high grade non Hodgkin lymphoma (NHL). They involve ALK, and are therefore called ALK+ ALCL.

The most frequent ALK+ ALCL being the the [t\(2;5\)\(p23;q35\)](#) with [NPM1](#) -ALK fusion protein, which localises both in the cytoplasm and in the nucleus.

The t(2;17)(p23;q23) has so far been described in only 1 case, and, like other t(2;Var) involving various partners and ALK, the fusion protein has a cytoplasmic localization; they are therefore called "cytoplasm only" ALK+ ALCL.

Clinics ALK+ ALCL without the t(2;5) (so called cytoplasmic only ALK cases) show clinical features similar to those of classical ALK+ ALCL: young age, male predominance, presentation with advanced disease, systemic symptoms, frequent involvement of extranodal sites, and a good prognosis. The t(2;17) case was that of a 14 yrs old girl.

Genes involved and Proteins

Gene Name [ALK](#)

Location 2p23

Protein 1620 amino acids; 177 kDa; glycoprotein (200 kDa mature protein) ; membrane associated tyrosine kinase receptor

Gene Name [CLTC](#)

Location 17q23

Protein 1675 amino acids, 191 kDa; component of the vesicles matrix originated from the plasma membrane or the golgi

Result of the chromosomal anomaly

Hybrid

gene 5' CLTC - 3' ALK

Description

Fusion Protein the 1634 N term amino acids from CLTC fused to the 562 C-term amino acids from ALK (i.e. the entire cytoplasmic portion of ALK with the tyrosine kinase domain)

Description

External links

Other database [t\(2;17\)\(p23;q23\)](#) [Mitelman database \(CGAP - NCBI\)](#)

Other [t\(2;17\)\(p23;q23\)](#) [CancerChromosomes \(NCBI\)](#)

database

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