**t(3;8)(q27;q24)**

Jean-Loup Huret

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

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**Clinics and pathology**

**Disease**
Non Hodgkin lymphoma (NHL)

**Phenotype/cell stem origin**
Found in diffuse large B-cell lymphoma (DLBCL) and Burkitt lymphoma (BL).

**Epidemiology**
4 cases to date, three cases of DLBCL and one BL. There was 1 male and 3 female patients. Patients were in their fifties (53, 53, and 56 years), apart from an eleven year old patient, but the latter was affected by a cancer-prone disease/ chromosome instability syndrome, namely an ataxia telangiectasia (AT).

**Clinics**
The t(3;8) may be considered as a secondary event in two DLBCL cases harbouring a t(14;18) (Bertrand et al., 2007). In the third case of DLBCL, the disease was thought to have evolved from a follicular lymphoma, also present in the patient in various organs (Wang et al., 2007). To be noted that the patient with a BL had AT (Sandlund et al., 2006).

**Prognosis**
Prognostic data were available from only two of the four cases, with survivals noted at: 26+ mths and 114+ mths (in two DLBCL cases).

**Cytogenetics**

**Cytogenetics morphological**
Major karyotypic abnormalities in 3 of 4 cases, with +7 in two patients, +12 in two cases, t(14;18)(q32;q21) in two cases, and duplication of the der(8)t(3;8) in two cases; Other anomalies known to be recurrent in lymphoid malignancies were also present: del(6q) (one case), and +18 (one case).

**Genes involved and proteins**

**BCL6**
**Location**
3q27

**Protein**
Transcription factor, with a N-term BTB/POZ domain and 6 zinc fingers. The protein can bind to sequence specific DNA and repress its trans-cription. Normally expressed in germinal center B and T cells

**MYC**
**Location**
8q24

**Protein**
Transcription factor, with a DNA binding domain, a helix-loop-helix domain and a leucine zipper. Forms heterodimers with MAX; MYC/MAX complexes bind DNA, activate transcription and promote cell proliferation and transformation.

**Result of the chromosomal anomaly**

**Hybrid gene**

**Description**
5' BCL6 is translocated next to MYC on the der(8).

**References**


This article should be referenced as such: