t(11;17)(p15;q21) involving the NUP98 gene is a rare event in adult acute myeloid leukemia.

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Clinics

Age and sex
86 years old male patient.

Previous history
No preleukemia, no previous malignancy, no inborn condition of note

Organomegaly
No hepatomegaly, no splenomegaly, no enlarged lymph nodes, no central nervous system involvement

Blood

WBC : 61 (neutrophils 0.2 x 10⁹/l) X 10⁹/l
HB : 9.2g/dl
Platelets : 60X 10⁹/l
Blasts : 10% blasts = 6.1 x 10⁹/l (Blood)
Bone marrow : 80% blasts (with features of monocytic lineage)

Cyto-Pathology Classification

Phenotype
M5b-AML

Immunophenotype
blistas CD34-, HLA-DR+ (78%), CD33+ (99%), CD13+ (99%), CD14+ (98%), CD15+ (95%)

Pathology
Acute myeloid leukemia, not otherwise specified (AML-NOS).

Electron microscopy
Not performed.

Diagnosis
Acute monocytic leukemia subtype.

Survival

Date of diagnosis: 02-2014

Treatment
Because of high advanced age, the treatment was based on transfusions and HYDREA® to control leukocytosis and cytopenias.

Complete remission : no
Treatment related death : no
Relapse : no

Status
Alive

Last follow up
03-2014

Karyotype

Sample
Bone marrow
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Implication of NUP98 in the t(11;17) by FISH, using RP11-120E20 (3'NUP98, in red) and RP11-438N5 (5'NUP98, in green) BACs probes. Arrows indicate the der(11) and der(17) chromosomes.

**Culture time:** 48h  
**Banding:** GTG  
**Results**  
48,XY,t(11;17)(p15;q21),+mar x2[23]/49,sl,+13[1].  
**Other molecular cytogenetics techniques**  
FISH  
**Other molecular cytogenetics results**  
48,XX,t(11;17)(p15;q21). ish  
t(11;17)(5'NUP98+;3'NUP98+)[2]  

**Comments**  
To the best of our knowledge, only three cases of paediatric AML with the t(11;17)(p15;q21) have been reported (Nishiyama et al, 1999; Forestier et al, 2003). Here we describe a case in a 86 year old man with acute monocytic leukemia. FISH analysis showed the implication of the nucleoporin 98 (NUP98) gene, located on chromosome 11p15. Considering the frequent formation of NUP98/HOX chimaeras in haematological malignancies [i.e. t(7;11)(p15;p15), t(11;12)(p15;q23) and t(2;11)(q31;p15) leading to the fusion of the NUP98 gene with HOXA, HOXC and HOXD clusters respectively], the t(11;17)(p15;q21) is likely to involve the HOXB cluster in 17q21.

**References**


This article should be referenced as such: