

Leukaemia Section

Short Communication

t(11;17)(p15;q21) NUP98/?

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Abstract

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Review on t(11;17)(p15;q21) NUP98/?, with data on clinics, and the genes involved.

Keywords

chromosome 11 ; chromosome 17; translocation; leukemia; NUP98

Clinics and pathology

Disease

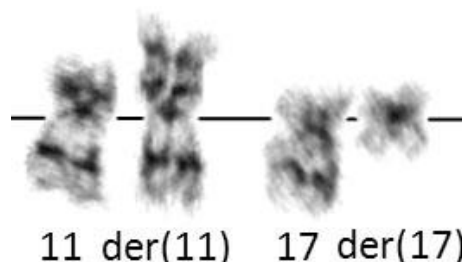
Myelodysplastic syndromes (MDS) and acute myeloid leukemias (AML)

Clinics

3 cases of paediatric AML (sex ratio 1M/2F) with the t(11;17)(p15;q21) have been reported , two AML M4 cases (aged 3 and 4 years), and one AML M0 (aged 18 years). No treatment and evolution data available (Nishiyama et al., 1999; Kerndrup and Kjeldsen 2001; Forestier et al., 2003

One MDS case with isolated t(11;17)(p15;q21) after neuroblastoma chemotherapy has been reported, a 8 years old girl. This patient achieved complete remission after bone marrow transplantation, but no data about induction treatment and response were reported. The patient died of this neuroblastoma ((Nishiyama et al., 1999).

In adult, only one case reported this translocation implicating NUP98 , a 86 year old man. Blasts CD34-, HLA-DR+ (78%), CD33+ (99%), CD13+ (99%), CD14+ (98%), CD15+ (95%). Because of high advanced age, the treatment was based on transfusions and HYDREA to control leukocytosis and cytopenias with no complete remission (Duployez et al., 2015).



Partial GTG-banding karyotype of the t(11;17)(p15;q21).

Cytogenetics

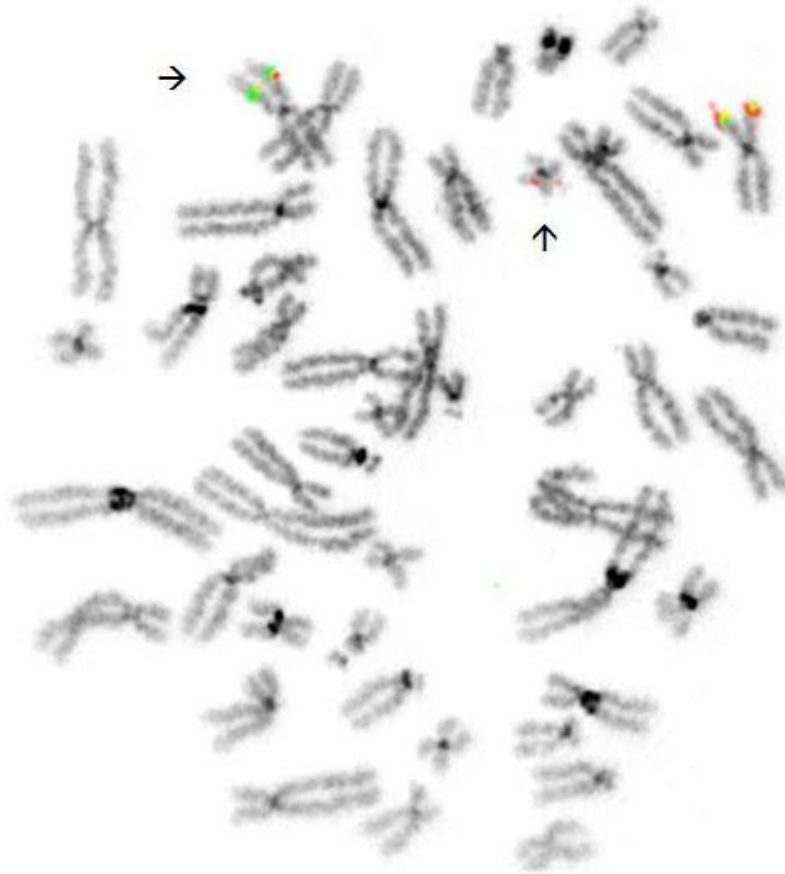
Probes

RP11-120E20 and RP11-438N5

Genes involved and proteins

Note

NUP98 is implicated in structural chromosome abnormalities with numerous partners.



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

NUP98 (nucleoporin 98 kDa)

Location

11p15.4

Protein

Nucleoporin 98, is a 98 kDa component of the nuclear pore complex involved in nucleocytoplasmic transport.

Result of the chromosomal anomaly

Hybrid gene

Description

5' NUP98 - 3' partner

References

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