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Leukaemia Section
Short Communication

t(6;11)(q15;q23)

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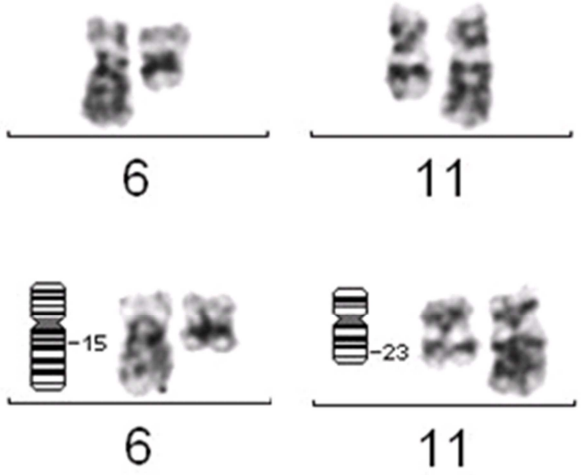
Identity



Giemsa-banding partial karyograms of t(6;11)(q15;q23). (Each left side chromosomes 6 and 11: normal, each right side chromosomes 6 and 11: derivative chromosome).

Clinics and pathology

Disease

Acute myeloid leukemia (AML)

Note

Only 4 cases to date, 3 of which do not provide further descriptions.

Phenotype/cell stem origin

All cases were acute myeloid leukaemia (AML); AML-M0 (1 case), AML-M2 (1 case), AML-M4 (2 cases).

Epidemiology

All patients were female between the ages of 13 to 68 years.

Prognosis

Very poor in 1 case (survival: only 2 weeks in AML-M2).

Cytogenetics

Cytogenetics morphological

It shows distinct balanced chromosomal abnormal-lities between chromosomes 6 and 11; however, it should be differentiated from t(6;11)(q13;q23) in association with MLL/ SMAP1 rearrangement.

Cytogenetics molecular

MLL breakapart FISH probe is very useful.

Additional anomalies

del(5)(q13q15) in 1 case, sole abnormality in remaining 3 cases.

Genes involved and proteins

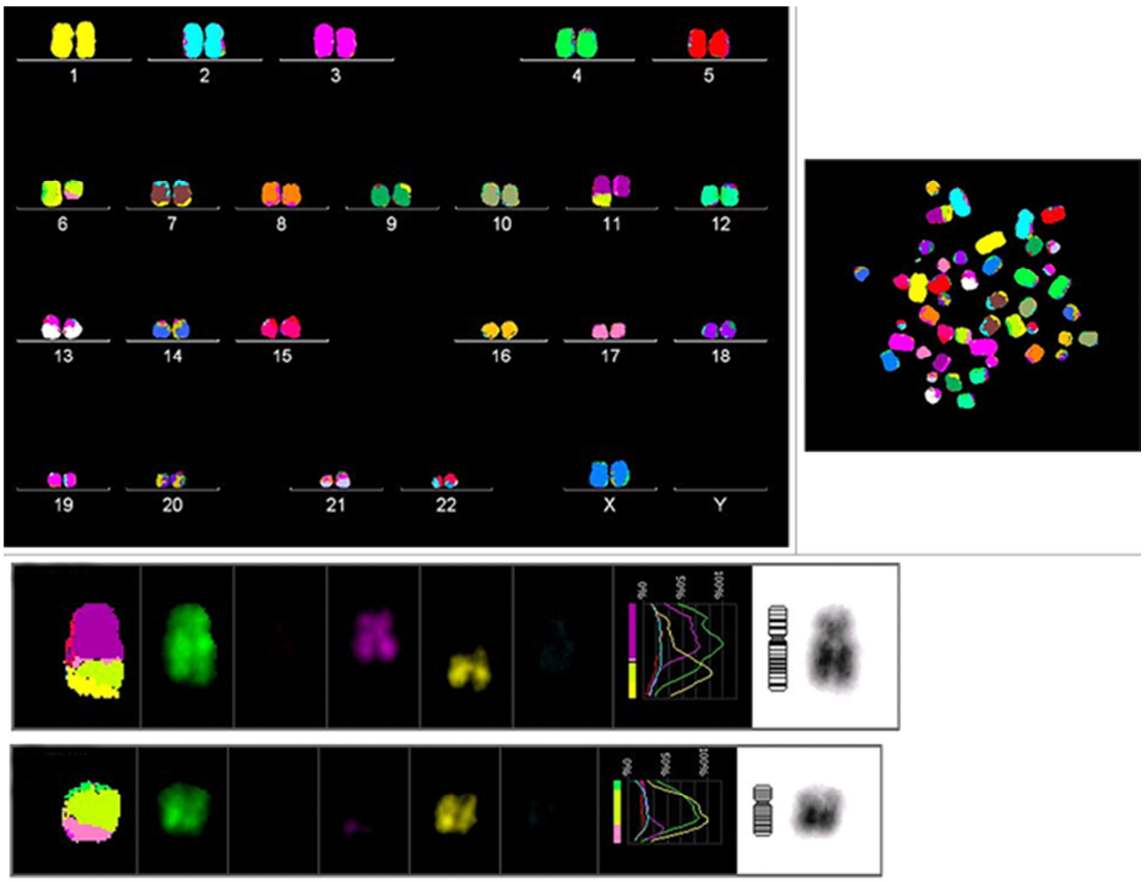
The gene involved in 6q15 is unknown.

MLL

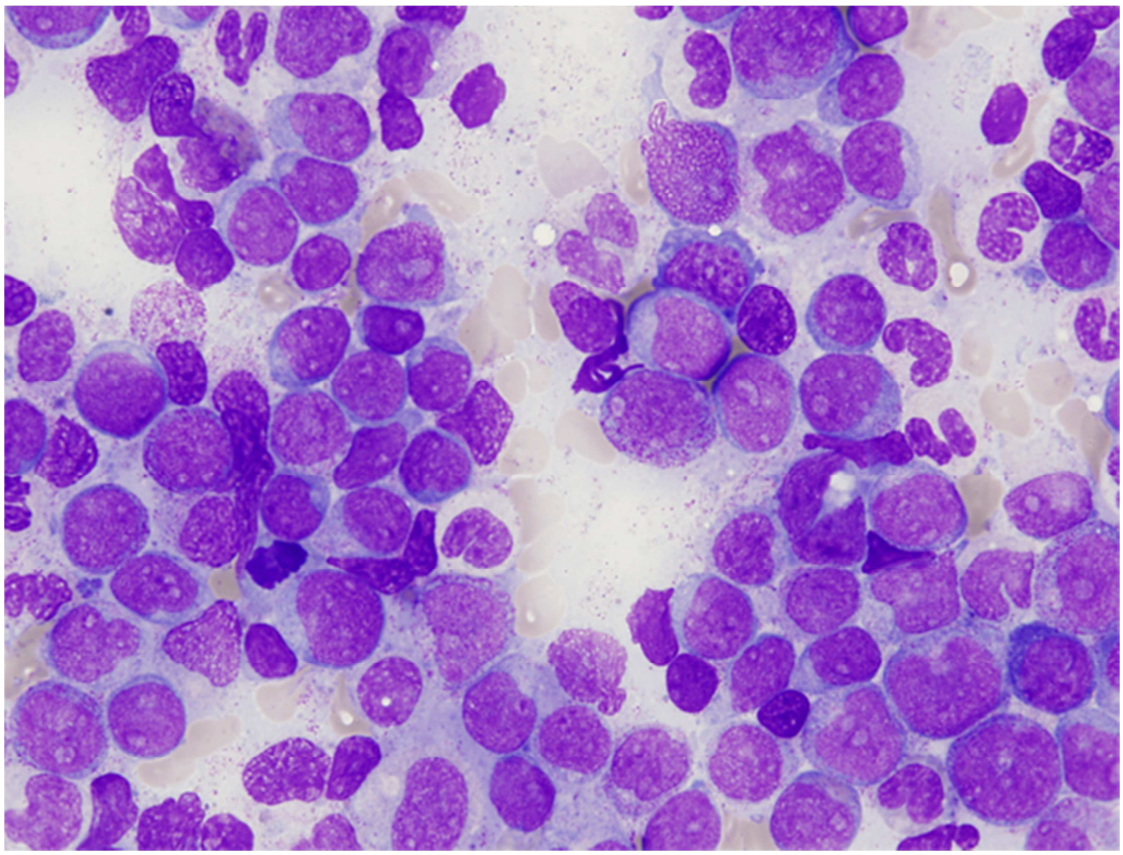
Location: 11q23

Note

More than 50 different translocation fusion partners in association with the MLL gene have been reported in the literature. In chromosome 6, t(6;11)(q27;q23) (MLL/AF6 rearrangement) is the most commonly encountered chromosomal abnor-mallity. In contrast, t(6;11)(q13;q23) or t(6;11)(q15;q23) is the rarest type of MLL rearrangement involving the long arm of chromosome 6.



Multi-color FISH image showing t(6;11)(q15;q23).



Bone marrow morphology from AML-M2 case with t(6;11)(q15;q23).

Result of the chromosomal anomaly

Hybrid gene

Note

Unknown. However, MLL/SMAP1 rearrangement was excluded in one case by both our group and Dr. Meyer.

Fusion protein

Note

Unknown.

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