DERIVATE DER (9) AS UNIQUE CYTOGENETIC ANOMALY IN A ACUTE MYELOID LEUKAEMIA FOR AML – M4: A CASE REPORT

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As far as we know, it is the first case of disease at an acute myeloleukemia (M4), which is described with the given anomaly der (9), as a unique not casual marker of an acute leukosis.

Cases i (9) have been described at an acute lymphoid leukosis (Martineau M, end att., 1996).

Disease cases by the Acute lymphoid leukosis at children with a syndrome of Down in which additional chromosomal reorganization i (9) has been found out have been described (Kalwinsky DK, et att., 1990).

The aberration der (9) as a cytogenetic marker has been described repeatedly at a myelosis at patients (Bennour A. and ett., 2011, Huh J. and ett., 2011).

The present history the first where the mutation der (9) as unique cytogenetic anomaly is described at an acute myeloleukemia (M4) (FAB-classification).

We represent to your attention the previous history:

No preleukaemia

Clinics

AGE	(d: 12; m: 10; y: 59)
SEX	M
ENLARGED LIVER	(-)
ENLARGED SPLEEN	(-)
ENLARGED LYMPH NODES	(-)

CENTRAL NERVOUS SYST INVOLVED – Condition of the expressed asthenia

Blood Data

WBC (10×9/l)	2,7
Hb (g/dl)	13,5
PLATELETS (10×9/l)	117
BLASTS (%)	0
BONE MARROW	41,4%

Cyto-Pathological Classification

Phenotype (FAB):	AML-M4
Immunophenotype (as CD):	not done
Rearranged Ig or Tcr:	not done

Pathology: Punctate nonuniformly cellular at the expense of granulocytes with blasts to 41,4%, promyelocytes – 19,2% difficultly differentiated with blasts. Half of blasts contains azurophilic granularity, In individual blasts – sticks of Auer. It was not possible to find out megacaryocytes. According to cytochemistry: a peroxidase negative (in dynamics – positive 7%), lipids – poorly positive 26%.

Electron microscopy:	not done
Precise diagnosis:	AML-M4, the first attack

Survival Data

DATE OF DIAGNOSIS (04/2011)

TREATMENT according to report «7 + 3»: (Cytarabine 100 mg/m2 – 7d.; Daunorubicine 60 mg/m2 – 3d.)

COMPLETE REMISSION	None
DEATH RELATED WITH TREATMENT	None
RELAPSE	None
IF RELAPSE: PHENOTYPE	None
ALIVE	
SURVIVAL	8 month

Karyotype

SAMPLE:	Bone Marrow

CULTURE TIME 24 h and 48-hours without stimulating agents

BANDING G-band

DETAILED COMPLETE RESULTS (using ISCN) 46,XY [18], der (9) [1]

KARYOTYPE(S) AT RELAPSE(S): 46, XY [20]

Molecular Cytogenetics

TECHNICS: Multiplex PCR

RESULTS: Anomalies it is not revealed

Other Molecular Studies: None

Other Findings: None

Comments

Even the insignificant quantitative clone of abnormal cells can dictate leukemia implications, let in the erased clinical variant, but with the satisfactory forecast for a survival. Moreover, it can be interesting in respect of etiology and forecast studying at an acute leukemia (AML-M4).

CALL FOR COLLABORATION

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