

CASE REPORTS in HAEMATOLOGY (Paper co-edited with the European LeukemiaNet)

Isolated trisomy 2 is non-random and may be found in myelodysplastic syndrome and in acute myeloblastic leukaemia. Case 1

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Clinics

Age and sex : 58 yrs old male patient

Previous history : preleukaemia; no previous malignant disease; -no inborn condition of note;

Organomegaly : no hepatomegaly; no splenomegaly; no enlarged lymph nodes; no central nervous system involvement

Blood

WBC : $1.9 \times 10^9/l$; Hb : 9.1 g/dl; platelets : $282 \times 10^9/l$;

Bone marrow : 1.4 % blasts%

Survival

Date of diagnosis: 1979

Treatment : red cell transfusion monthly

Complete remission was obtained

Treatment related death : -

Relapse : -

Status : A

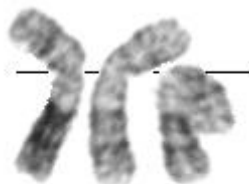
Survival : 26 yrs +

Karyotype

Sample : Bone marrow; culture time : 24H and 48 H; banding : GTG

Results : 46,XY, [6]/ 47, XY, +2 [14]

Other molecular cytogenetics technics : FISH using the BAC probe RP11-375H16 (2q23.1)



trisomy 2 (case 1)

G-banding karyotype revealed isolated trisomy 2 of case 1

Comments

Trisomy 2 as single chromosomal abnormality appears to be associated with MDS on the contrary to

AML where it is frequently encountered in association to other unbalanced chromosomal abnormalities [ref.1]. This observation therefore suggests that trisomy 2 could be an early genetic abnormality in MDS. Indeed, from the 9 MDS/AML described cases with isolated trisomy 2 (including our 2 cases), 7 cases revealed isolated trisomy 2 at MDS presentation. MDS in transformation was diagnosed among the 4 oldest patients, though age does not carry prognostic significance according to the IPSS [ref.2]. 5 of the 9 published cases evolved to acute leukaemia.

Internal links

Atlas Card [+2 or trisomy 2](#)

Case Report [Isolated trisomy 2, Case 2](#)

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Contributor(s)

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Case 1. Atlas Genet Cytogenet Oncol Haematol. September 2006 .

URL : <http://AtlasGeneticsOncology.org/Reports/02RocheID100015.html>

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