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Leukaemia Section

Short Communication

t(2;4)(p23;q25-q35)

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Clinics and pathology

Disease

Myeloid lineage, described in five cases:

- myelodysplastic syndromes (MDS) to AML-M2 (two cases).

- de novo acute myeloid leukemia (AML)-M2 (two cases),

- agnogenic myeloid metaplasia (AMM) (one case).

Epidemiology

3F/2M, AGE 41-81 yrs (average = 67.8 yrs).

Prognosis

Two patients with AML achieved complete remission.

Cytogenetics

Note

In all five patients, no cytogenetically normal cells were observed at the time of the diagnostic cytogenetic study.

Additional anomalies

The four patients with AML had no additional abnormalities; the patient with AMM also had an interstitial deletion of 13q. Metaphase FISH analysis was performed on the AMM patient, using whole chromosome paints for chromosomes 2 and 4. FISH revealed a complex insertion of chromosome 4 into

chromosome 2, with resultant 2p23;4q31 fusion and deletion of 2p23->2pter.

Variants

Metaphase FISH analysis of one patient with AML also suggested deletion of 2p23->2pter.

Genes involved and proteins

Note

Deletion of 2p has been suggested as a recurrent abnormality in AML.

References

Farag S, Challis J, White J, Garson OM. Novel translocation (2;4) with consistent involvement of 2p23 in acute nonlymphocytic leukemia (M2). Cancer Genet Cytogenet. 1992 Jan;58(1):48-51

Shi G, Weh HJ, Hossfeld DK. Translocation (2;4)(p23;q25): an additional case of a new recurrent anomaly in acute myeloid leukemia. Cancer Genet Cytogenet. 1993 Oct 15;70(2):140-1

Sundareshan TS, Madhumathi DS, Appaji L. del(2)(p23) as a sole abnormality in a case of acute myeloid leukemia. Cancer Genet Cytogenet. 2002 Apr 15;134(2):172-4

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