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Case Report Section

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Translocation (X;20)(q13;q13.3): a nonrandom abnormality in four patients with myeloid disorders: case 4

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Clinics

Age and sex

66 years old female patient.

Previous history

No preleukemia. Previous malignancy: No clinical information.

Blood

WBC : 4.16X 10^9/l
HB : 13.5g/dl
Platelets : 103X 10^9/l

Cyto-Pathology Classification

Diagnosis

Myelodysplastic syndrome (MDS): pancytopenia and thrombocytopenia

Survival

Relapse: no

Status: No clinical information

Survival: 1 month

Karyotype

Sample: BM

Culture time: 24/48h unstimulated cultures

Banding: G-banding

Results

46,X,t(X;20)(q13;q13.3)[3].ish t(X;20)(q11.2-12;q13.3) (wcpX+, wcp20+, AR_; wcp20+, D20S108+, AR+, wcpX+)/46,XX[18]

Other molecular cytogenetics results

46,X,t(X;20)(q13;q13.3)[3].ish t(X;20)(q11.2-12;q13.3) (wcpX+,wcp20+,AR_;wcp20+,D20S108+,AR+,wcpX+)/46,XX[18]

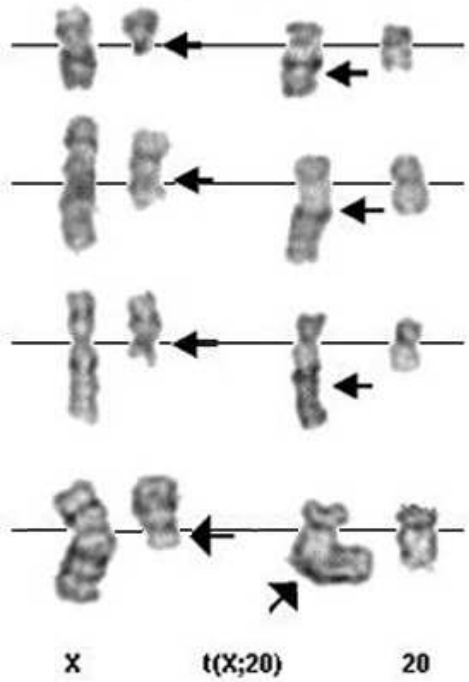

Fig. 1. Partial karyotypes of the translocation t(X;20)(q13;q13.3) for cases 1•4 (top to bottom). Arrows indicate the derivatives 20 and X.

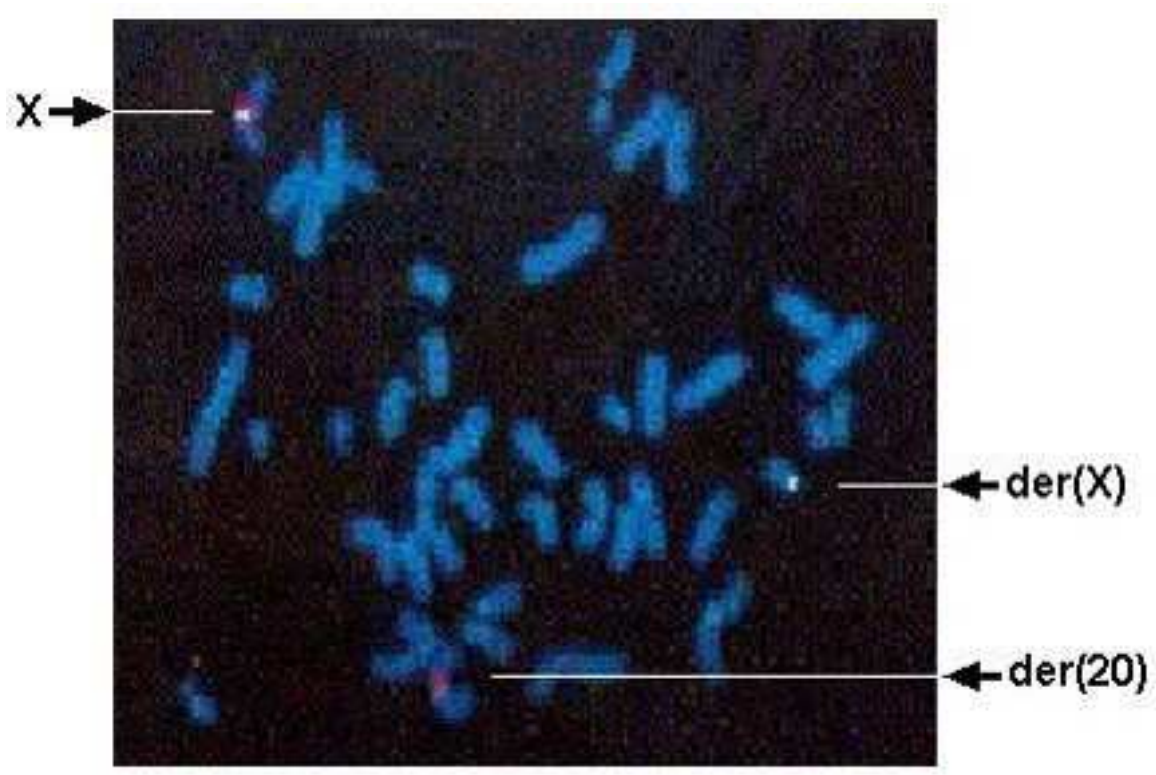

Fig 2: Case 4: X-centromere probe DXZ1 (green) hybridized to the normal X and the derivative X (arrows). The androgen receptor (Xq12) AR (red) probe hybridized to derivative 20 and the normal X (arrows). The breakpoint on the X chromosome is proximal to AR. The karyotype is 46,X,t(X;20)(q13;q13.3).ish t(X;20)(**q11.2q12**;q13.3)(wcpX+, wcp20+, AR_; wcp20+, D20S180_, AR+, wcpX+). The revised breakpoints identified with FISH analysis are highlighted in bold.

Other Findings

Note:

In case 4, the breakpoint on X-chromosome was found to be more proximal between Xq11.2q-12 by FISH using androgen receptor probe.

References

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