

Supplementary Material

Detection of simple, complex and clonal chromosome translocations induced by internal radioiodine exposure: A cytogenetic follow up case study after 25 years

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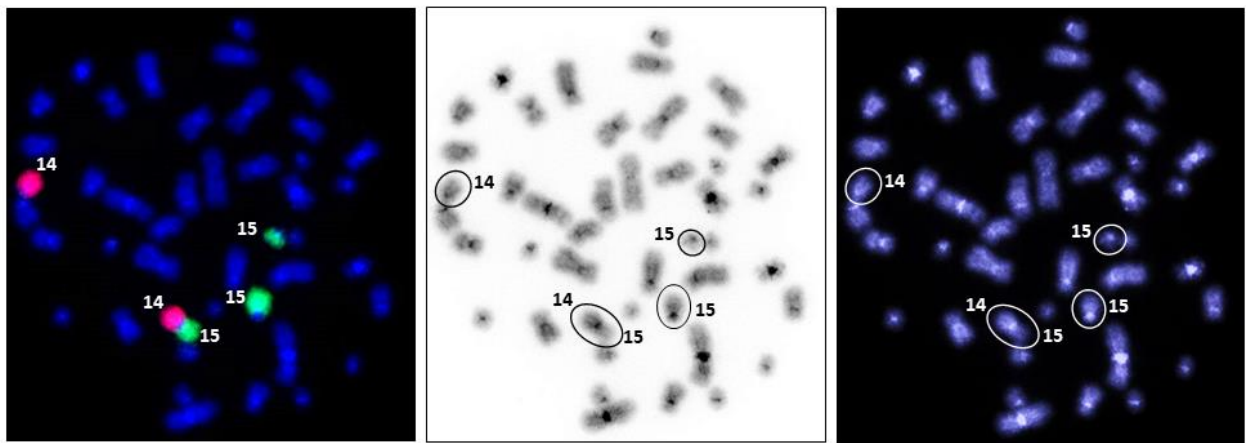
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Materials and methods:

Metaphase chromosomes prepared from the blood sample of radioiodine patient was subjected to FISH using a cocktail of DNA probes specific for chromosomes 14 (Texas Red conjugated; red color) and 15 (Fluorescein conjugated; green color). The slides were washed for 2 min at 72°C for 2 min in a solution of 1 X SSC. The slides were dehydrated, air-dried and subsequently stained with DAPI. The same slide that was previously hybridized with multicolor FISH was used for verification of the chromosomes involved in clonal translocation.

Results:

A representative metaphase picture for the clonal translocation involving chromosomes 14 and 15 is shown below:



Suppl.Fig. 1

The chromosomes involved in translocation are marked with circles. Note the centromeric region of incomplete chromosome 15 shown in grey scale and inverted grey scale. FISH using telomere probe showed the signal on the q arm of incomplete chromosome, which suggest that, the translocation between chromosomes 14p and 15 q may be balanced. Although Robertsonian translocations involving acrocentric chromosomes are common as suggested, the translocation we observed in the radioiodine patient is not a Robertsonian translocation.