

Letter to the Editor

An Apparent Balanced Translocation between
Chromosomes 7 and 13 [t(7;13) (p15;q32)]
in a 47,XYY Individual

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Additional chromosomal abnormalities in individuals with aneuploidy is a rare event. Recently, a case of 46,XY/47,XYY with fragile X chromosome was reported by Milunsky and his associates (1993). We report on a new case of 47,XYY with a translocation involving chromosomes 7 and 13 *i.e.* [47,XYY,t(7;13) (p15;q32)] who was referred for severe behavioral difficulties.

JZ, an 8 years old boy who presented with behavioral problems, was born to a normal 28 year old mother who abused drugs. His weight at birth was 7 1/2 lbs. Motor milestones were reported as normal and he walked at 1 year of age. He was toilet trained between 2 1/2–3 years of age. His head circumference (25"; 50%), weight (108 lbs; 98%), height (52"; 98%) were recorded at 8 years of age. Presently, he is functioning in the mildly retarded range. He is mildly hypotonic, able to jump but can not hop. He is attending special education classes and doing very poorly.

Chromosome preparations were obtained from phytohemagglutinin (PHA) stimulated peripheral blood. The GTG techniques were used according to standard protocol (Verma and Babu, 1995).

Individuals with 47,XYY have often been associated with violent criminal behavior, a concept that has recently been refuted (rev Hook, 1973; Welch, 1985). Our patient, who has behavioral problems, was referred to rule out chromosomal abnormalities. He has an apparently balanced reciprocal translocation involving chromosome 7 and 13 *i.e.* 47,XYY,t(7;13)(7qter→7p15::13q32→13qter;13pter→13q32::7p15→7pter) as revealed by GTG-technique (Fig. 1). The karyotype was confirmed by FISH painting probe. Whether or not there is a significant association between sex aneuploidy and balanced translocation remains unclear. However,

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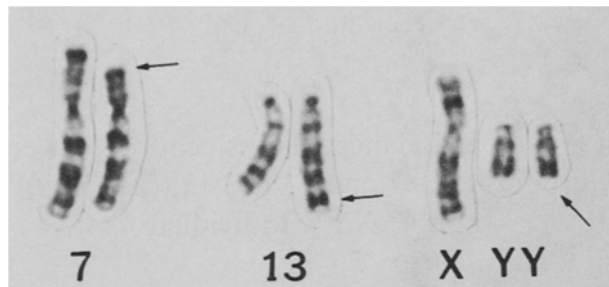


Fig. 1. Partial karyotype showing chromosomal aberrations (See text).

the father is in a maximum security prison and could not be reached. The mother was cytogenetically normal.

References

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