


UPD 13: no indication of maternal or paternal imprinting of genes on chromosome 13

We recently reported the first example of maternal uniparental isodisomy for chromosome 13.1 This was found in a phenotypically normal male who inherited a t(13;13) in a balanced karyotype from his mother who also carried the same isochromosome. The transmission of the t(13;13) from mother to child was confirmed by analysis of di-nucleotide repeat markers in the child and both his parents and we concluded that there were no maternally imprinted genes on chromosome 13.

Further analysis of the inheritance of this translocation in this family was not initially undertaken because the son’s grandfather was not available for study. However, by recent analysis of the grandmother’s DNA we found that there had been no transmission of two informative dinucleotide chromosome 13 alleles to her daughter (figure). By inference, the t(13;13) must have been transmitted by the grandfather either from a pre-existing constitutional or de novo translocation.

The first example of paternal UPD of chromosome 13 allows us to extend our original conclusion to suggest that there is no paternal or maternal imprinting of genes on chromosome 13.

HOWARD SLATER
JANET H SHAW
AGNES BANKIER
SUSAN M FORREST
The Murdoch Institute,
Royal Children’s Hospital,
Melbourne, Victoria 3052,
Australia

GAREY DAWSON
Cytagenetics Laboratory,
Monash Medical Centre,
Melbourne, Victoria 3168,
Australia