SUMMARY

1. Six novel variants (-51T→C, -152C→G, -321G→C, -480delA, -581C→A, and Gly272Asp) were identified in the promoter region and the coding region of the 5-HT_{1A} receptor gene in addition to the mutations (Pro16Leu, 294G→A and 549C→T) that have been reported previously.
2. Three novel polymorphisms were found in the promoter region; two relatively common (-90G→C, -803G→T) and one rare (-1769G→A). Polymorphic status at both loci suggested strong linkage disequilibrium between the -90G and -803G alleles, and between the -90C and -803T alleles.
3. Two novel variants (-933T→C and -413G→A) were found only in schizophrenics. A patient with the -933T→C variant had some unusual clinical characteristics in addition to typical schizophrenic symptoms.
4. No significant differences in either genotypic or allelic frequencies of these variants were found between patients and controls. This study provided no evidence for an association between schizophrenia and the variants in the 5-HT_{1A}, AP-2, and CREB genes.
5. Significant differences in the distribution of genotypes at the -90 and -803 loci in the AP-2 gene were observed in patients with episodic course, when compared with controls, although the differences observed for these loci were not significant after Bonferroni correction. This study provides preliminary evidence that schizophrenia characterized by an episodic course may correlate to the -90G→C and -803G→T polymorphisms in the promoter region of the AP-2 gene.
6. A follow up study using a larger sample will be necessary to determine if there is statistical evidence for the involvement of the AP-2 and CREB genes in susceptibility to particular schizophrenic phenotypes.
7. Further detailed analysis will be necessary to support the notion that the transversions from -90G to C and from -803G to T in the AP-2 gene, and

the transition from -933T to C in the CREB gene modify transcriptional activity of these genes.

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