NEUROLEPTIC MEDICATION REVERSES P300 DELAY AND ATTENUATION IN SCHIZOPHRENIA

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P300 amplitude reduction is commonly found in schizophrenia but P300 latency generally has been reported to be normal. However, conflicting findings are present in the literature and interpretation has been confounded by medication effects and methodological differences. This study used a standard auditory oddball paradigm to compare the latency, amplitude, and topographic distribution of P300's in neuroleptic-free schizophrenic patients with those of healthy controls. The patients then were treated for six weeks with either remoxipride or haloperidol and their P300's were reassessed. P300's were attenuated and delayed among neuroleptic-free patients, but there was no peak lateralization or amplitude asymmetry over temporal regions. Subsequent neuroleptic treatment normalized P300 latencies and increased P300 amplitudes but the latter remained below normal limits over all except frontal areas. There were no correlations between P300 latency or amplitude and clinical symptoms either before or after treatment. The finding of a P300 delay in neuroleptic-free schizophrenic patients which is normalized by neuroleptic treatment has not been reported previously. Neuroleptic effects on P300 amplitude and latency were independent of effects on clinical symptoms, and could not be attributed to anticholinergic activity.
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