Contingent negative variation (CNV) in mood disorders

P. Papart, M. Ansseau and M. Timsit-Berthier
Psychiatric Unit, C.H.U. du Sart Tilman, B-4000 Liège, Belgium

Key words: Contingent negative variation; Depression; Antidepressant drugs

The assessment of depressive patients is essentially based on clinical symptomatology, which exhibits considerable limitations. It is therefore of major interest to develop methods able to objectivate clinical outcome during depressive episodes and to predict the response to treatment.

In depression, CNV studies have shown abnormalities in both amplitude (too low or too high) and duration.

In our studies, we found that depressed patients with low CNV amplitude had higher scores on the retardation factor of the Hamilton Depression Scale.

After recovery, patients with low CNV amplitude during the active phase of the illness presented a significant increase of CNV whereas patients with high CNV amplitude during illness exhibited the opposite change. Low CNV amplitude patients had a preferential response to noradrenergic antidepressants whereas high CNV amplitude patients were better improved with serotonergic antidepressants.

Taken together, these results suggest that normalization of CNV amplitude represents a reliable index of positive outcome and that the abnormalities of CNV amplitude (low or high) can predict the response to selective antidepressants. Moreover, low CNV amplitude also appears to characterize depression with psychomotor retardation.

Neurochemical and behavioral evidence for a central indirect dopaminergic agonist activity of the antidepressant medifoxamine in mice

J.-M. Vaugeois, D. Pouhé, F. Lemonnier and J. Costentin
Unité de Neuropsychopharmacologie Expérimentale, CNRS EP 76, Faculté de Médecine et Pharmacie de Rouen, F-76803 Saint-Etienne du Rouvray, France and "Lipa Santé, Division Anphar-Rolland, 34, rue Saint Romain, F-69379 Lyon Cedex 08, France

Key words: Antidepressive agents; Behaviour; Animal; Dopamine; Motor activity

Medifoxamine (N,N'-dimethyl-2,2-diphenoxyethylamine fumarate) is an antidepressive agent (Clédial®) marketed in France. In vitro, medifoxamine displays a moderate affinity for various receptors and for serotonin, noradrenaline and dopamine (DA) neuronal transporters. The antidepressant efficacy of medifoxamine may result from an impact on these different molecular targets. We confirm here that medifoxamine binds to the DA neuronal transporter both in vitro and in vivo. This mechanism of action operates in mice at doses which elicit a positive response in the behavioral despair test but are devoid of any stimulant motor effect.

First, the ability of medifoxamine to inhibit the uptake of tritiated dopamine by crude synaptosomal striatal preparations obtained from Swiss albino mice was investigated in vitro. Medifoxamine demonstrated a dose-dependent inhibitory effect on