ORAL COMMUNICATIONS

Long-term treatment with antidepressant agents affects Ca^{2+}/calmodulin protein kinase II in hippocampal presynapses.

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Ca^{2+}/calmodulin protein kinase II (CaMK II) is enriched in the presynapse, where it is involved in the control of neurotransmitter release. Protein phosphorylation promoted by CaMK II was analyzed in crude subsynaptosomal fractions prepared from rats treated for two weeks with one of the three antidepressant agents paroxetine, fluvoxamine, venlafaxine. The fractions used were synaptosomal membranes (LP1), synaptic vesicles (LP2), and synaptic cytosol (LS2). We found a significant increase of phosphate incorporation in synaptic vesicles, as compared to controls, in the autophosphorylated α-subunit of CaMK II and in the two major substrates of the kinase , synapsin I and synaptotagmin. Increased phosphorylation, in the case of CaMK II, ranged from 170 to 270%, and was confirmed by immunoprecipitation of the phosphoprotein. This was solely due to increased phosphorylation, because quantitative immunoblot showed that total kinase amount was unchanged. As CaMK II and related substrates are involved in the regulation of neurotransmitter release, this result suggests a new site for the action of antidepressant agents.

Reversible Monoamine Oxidase-A Inhibitor (Moclobemide) and Selective Serotonin Reuptake Inhibitors (SSRI)

Treatment in Post Stroke Depression

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To evaluate Post Stroke Depression, we use CODE DD System, a polidiagnostic system designed and developed by Professor Thomas Ban, Vanderbilt University, USA.

The aim of CODE DD system is to help define homogeneous diagnostic biological groups, since, as Ban says, there is an increasing evidence that a valid psychiatric nosology is an essential prerequisite for the better interpretation of the contributions of the neurosciences.

We use Code DD system to evaluate Post Stroke Depression. Based on this methodology, we can get simultaneous diagnoses in 25 European, British and American diagnostic systems. When we finish a semistructured interview, which analyses 90 variables significant to the depressive illness, we obtain the affection status of 10 functional areas, together with a severity score.

(1) Early insomnia - Motor restlessness
(2) Depersonalization - Disorders of the experience of the self
(3) Disturbance of concentration - Retarded thinking
(4) Phobias - Delusions
(5) Anxiety - Hostility
(6) Constricted affect - Apathetic indifference
(7) Feelings of inadequacy - Hopelessness
(8) Displeasure - Dysphoria
(9) Vegetative manifestations - Abulia
(10) Decreased sex drive - Suicidal tendencies

Code DD system enables us, in the first place, to have a more comprehensive point of view of the PSD incidence.

Our percentages are higher (70%) than the ones mentioned in other works.