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IMS: MOOD ENHANCEMENT OR ANTIDEPRESSIVE STRATEGY?

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This study contributes to the question whether transcranial magnetic stimulation (TMS) acts as a powerful antidepressive (1,2,3) or as a mood enhancement therapy. 12 patients affected by major depression underwent TMS as an add-on therapy for 4 weeks. The method has been described before (4). Age, gender, illness and episode duration, episode number, HAMD-S, drug levels and readmissions in a follow-up period of 1 year were recorded. At the end of the study patients with a remission rate equivalent to 50% reduction from the initial HAMD-S were defined as responders. A statistical trendency of a difference in improvement between 66.7% (n=8) responders and 33.3% (n=4) non-responders is apparent at day 10 p=0.07 (t-Test), markedly increasing in significance after 4 weeks to p=0.01. 37.5% (n=3) patients of the responder group relapsed during one year follow-up. The 4 non-responders underwent a treatment with TCA (n=3) or ECT (n=) after the study and remained in remission during the follow-up period. According to our previous results (4), this study suggests that single TMS possibly accelerates the onset of improvement in treatment of depression and enhances mood rather than exerts an antidepressive action.

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HYPNOTICS AND SEDATIVES: A REVIEW

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Hypnotics and anxiolytics are still commonly prescribed drugs and new compounds are being developed with reduced side-effects and day-time drowsiness. Although much of the research has concentrated on developing "clean" drugs, it is important that in the rush to develop such compounds, other potentially serious side-effects are not overlooked. The majority of studies involving sedatives and hypnotics have been carried out in young healthy volunteers and the relevance of these to patients must always be borne in mind. In volunteer studies, the duration of administration is usually very short and assessment procedures are often crude with little clinical relevance. In addition, important psychological phenomena such as memory are poorly defined and measured. Studies also vary in terms of medications prescribed, doses given, duration of exposure, methodology and assessment procedures making comparison between studies difficult. In addition, a considerable amount of clinically important information on the psychopharmacology of these drugs tends to be published in journals not commonly read by clinicians and information may not be readily available. In general, a greater emphasis on objective, quantitative and clinically relevant measures to assess the pharmacodynamic effects of these drugs is needed. Hypnotics and sedatives are an effective group of drugs but it is important to be aware of the clinically important side-effects. These and related issues are reviewed.

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Reduction of thalamic neurons which project to cingulate gyrus in schizophrenia - A quantitative postmortem study

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Objective: The cortical projections of the anterior nuclei of the thalamus (ANT) are to the cingulate cortex. Animal studies suggest that parvalbumin, a calcium-binding protein, is a marker for thalamic neurons which project to the cortex.

Method: Using immunocytochemical techniques, the density of parvalbumin-positive neurons in ANT of 14 schizophrenics (mean age=52.4 years, 8 men, 6 women) and 12 age- and sex-matched normal controls was measured. Statistical analysis, using ANOVA, with age, sex, length of illness, length of fixation and shrinkage factor as covariates was then performed.

Results: We found a significantly reduced density of parvalbumine-positive neurons in the left ANT (- 41 %) and in the right ANT (- 27%). These reductions were not correlated to the length of disease.

Conclusion: Thalamo-cortical projections are known to be glutamatergic. Therefore, the findings of reduced thalamo-cortical projections to cingulate gyrus strengthen the hypothesis of impaired function of the glutamatergic system in schizophrenia

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NONCOMPLIANCE AND ITS CONTROL IN BENZODIAZEPINE WITHDRAWAL

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The covered drug reduction in patients with benzodiazepine and opiate abuse is a well known treatment in our department of psychiatry. Non-compliance of the patients complicates the therapeutical strategy and leads to longer staying of the inpatients in the hospital. To combine the therapeutical psychiatric interventions with the results of the testing for compliance we analysed the psychopharmaca concentrations in serum and in urine of the patients in the early morning up to four times a week. We chose two methods for HPLC detections of the drugs and compared their precision and limits of detection (HPLC autoanalyser). The analysis of basic agents and the method with high specificity and sensitivity for benzodiazepines were used. Our daily results were included in the therapeutical intervention and the discussion with the patient. Increased self control and reflection by the patient was developed and the therapeutical aims were confirmed.

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