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**NEW PROTOCOLS FOR LIGHT THERAPY IN GENEVA AND LAUSANNE**

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**Objective:** to evaluate the impact of new protocols for light therapy in two psychiatric centres related to a university.

**Method:** We review treatment procedures, research protocol and the outcome of 13 patients treated in the same way with bright artificial light. Each patient was exposed to 3500 lux daily during one hour for ten days.

**Results:** Depression rating scale (HAM-D) reduction is more important for seasonal affective disorder (SAD) than for other mood disorders (in the latter cases, HAM-D reduction is comparable to placebo).

**Conclusion:** Preliminary results are congruent with current data in the literature. Further studies are necessary to achieve statistical significance. The study emphasizes the usefulness of the standardization and of the multicentric setting in this field of light therapy.

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**THYROLIBERIN IN COMPLEX THERAPY IN PATIENTS WITH DEPRESSIVE SYNDROME**

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Investigation was carried out on 78 patients (54 women, 24 men, average age of 34 years) with borderline forms of asthenic states and affective disorders. TSH as assigned in the form of film. Affective disorders in patients were in accordance with the criteria of asthenic-depressive syndrome. Maximal therapeutic effect has revealed itself in 4-5 days and then THR was used only as a support therapy. THR had a psychostimulant effect when a melancholic component was predominant in the clinical picture, but it displayed an energizing effect in cases with apathetic symptoms. It is known that a decline in thyroid hormone secretion can be one of the main signs of pathogenetic mechanisms in depression. We have found that THR can exert a kind of verbal disinhibition in patients who were in a state of anxiety, fussiness or internal bewilderment. After THR treatment, the vague feelings and presentiments were in complete verbal form. This form opens wide perspectives for the application of THR in psychotherapeutic treatment. The properties of THR show that it can be classified as a psychostimulant with antidepressant action.

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**MEMBRANE FLUIDITY OF AMINE STORING BODIES IN DEPRESSION**

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A large fall in noradrenaline (NA) concentration in the locus coeruleus (LC) is critically involved in mediating depression. With the potassium permanganate (KMnO<sub>4</sub>) method for electron microscopy (EM), designed to demonstrate catecholamines as dense cores inside vesicles, we have shown that in the normal human LC perikarya numerous large globules contain dense cores, indicating the presence of NA. This accumulation of large globules in man could represent a back-up storage compartment of neurotransmitter necessary for the increased demands to cope with unpredictable stresses, inherent in man's ecological environment. Our objective was to confirm the involvement of the globules in NA loss in depression by studying 10 suicide cases. We applied the KMnO<sub>4</sub>/EM method, as well as colloidal gold EM staining using a rabbit anti-serum to NA. We found that the globules in the LC of the suicide cases were as numerous as in controls, but their electron-density was greatly reduced indicating depletion of NA. This was confirmed by reduced immunoreactivity of NA. Abnormalities in the ultrastructure of membranes, indicating membrane fluidity, i.e., reduced cholesterol, support the hypothesis that membrane instability may cause neurotransmitter leakage and can be considered a core dysfunction in depression, justifying the effects of stress hormones.

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**CT AND MRI IN THE DIAGNOSIS OF MILD DEMENTIA**

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**Objective:** to evaluate longitudinally clinical characteristics of patients with mild dementia (Alzheimer disease AD), vascular dementia (VD), mixed AD-VD dementia, and compare changes on computer tomography (CT) and magnetic resonance imaging (MRI) scans in order to predict course features of the disease.

**Method:** 45 patients with probable AD (NINCDS-ARDRA criteria), 25 patients with probable VD (NINDS-AIREN criteria) and 25 patients with mixed dementia of mild severity (range by CDR, 1993) for whom CT and MRI scans had been performed at baseline, were under investigation. Focal ischemic lesions were observed with MRI in 43 patients and with CT in 32 subjects, while diffuse white-matter lesions were found in 72 patients with MRI and with CR in 54 patients. In patients without focal and/or diffuse CT detected lesions moderate dementia (range 2 by CDR) became gradually evident on average in 2.5 years independently of MRI baseline investigation. There was a greater frequency of ischemic brain lesions shown on CT than on MRI scans at baseline in patients in whom abrupt onset of moderate dementia after stroke took place. As suggested by Lopez et al (1995) van Swieten et al (1992) comparing CT with MRI is more specific in reflecting or predicting subsequent cerebrovascular disease.