

prevalence rate of the bipolar spectrum is estimated to lie between 5 and 7% of the population.

- [1] Robins LN, Helzer JE, Croughan J, Ratcliff KS (1981) National Institute of Mental Health Diagnostic Interview Schedule. Its history, characteristics, and validity. *Arch Gen Psychiatry* 38: 381–389

#### DIFFERENT ENLARGEMENT OF INTERNAL AND EXTERNAL CSF SPACES IN ENDOGENOUS AND SO-CALLED NEUROTIC DEPRESSION. A PLANIMETRIC CT-SCAN STUDY

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**Purpose:** The separation of 'endogenous' versus 'neurotic' depression in the ICD-9 criteria was abandoned in ICD-10. Nevertheless, different types of brain pathology could underlie these disorders.

To investigate possible alterations in brain morphology in the two depressive syndromes, planimetry of different regions of internal and external CSF spaces in patients with so-called 'endogenous' depression and patients with 'neurotic' depression as compared to normal controls was performed.

**Patients and methods:** 23 patients with endogenous depression (ICD-9 296.1), 28 patients with neurotic depression (ICD-9 300.4), and 56 age and sex-matched healthy controls were investigated.

In 9 mm transversal CT-scans from patients and controls, planimetry of lateral ventricles, total brain area, third ventricle, all cortical sulci, Sylvian fissure, and interhemispheric CSF space was performed.

Ventricle to brain ratio (VBR) and the maximum area of third ventricle was calculated.

The sum of the areas of frontal and parietal-occipital sulci, Sylvian fissure and interhemispheric CSF space were expressed as ratio to whole brain area.

P-values were adjusted for the co-variate age.

**Results:** Both the endogenous and the neurotic patient-group showed significant morphological alterations compared to controls with a different pattern for each group.

Endogenous depressive patients had 25% larger maximum areas of third ventricle ( $p = 0.046$ ) and an enlargement of left upper frontal ( $p = 0.029$ ) and basal frontal left and right ( $p = 0.041/0.036$ ) cortical sulci.

Neurotic depressive patients had larger upper frontal ( $p = 0.045$ ) and upper parietal-occipital ( $p = 0.046$ ) sulci on the left side and a smaller d a smaller Sylvian fissure in the superior plane (ramus ascendens) left and right ( $p = 0.040/0.023$ ).

**Conclusion:** The results demonstrate that so-called 'neurotic' and 'endogenous' depressed patients have different types of brain pathology neurotic patients having more left hemispheric, endogenous patients more third ventricular and left upper frontal/bilateral basal frontal sulcal enlargement.

#### DISCRIMINATING PATTERNS OF REGIONAL CEREBRAL BLOOD FLOW (rCBF) IN THREE SUB-TYPES OF DEPRESSION. A LONGITUDINAL SPECT STUDY

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**Objectives:** The aim of this study is to identify rCBF patterns that discriminate patients with recurrent, bipolar, double depression (DSM-IV) and normal controls, and to study the behavior of these patterns after clinical recovery.

**Method:** Ten patients with bipolar depression, 13 with recurrent major depression, 9 with double depression and 12 normal controls were studied with Tc<sup>99m</sup> HMPAO SPECT. Fourteen ROIs were delimited, and ratios to average global flow were obtained. Fifteen patients were re-scanned after clinical recovery.

**Results:** Three canonical functions involving ratios in temporal (left and right), inferior frontal (left), basal ganglia (left) and thalamus (left) discriminated the 4 groups overall 59% efficacy (80% for bipolars, 69% recurrences, 44% double depressives and 41% normal controls). The specific rCBF pattern for recurrences disappeared after recovery, but the bipolar pattern persisted to great extent.

**Conclusions:** 1) Patients with bipolar and recurrent major depression exhibit specific patterns of rCBF, which in the latter tend to disappear after recovery.

2) A specific rCBF pattern for double depressives could not be determined.

#### ANHEDONIA, ALEXITHYMIA AND LOCUS OF CONTROL IN MAJOR DEPRESSIVE DISORDERS

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**Introduction:** Anhedonia is a main characteristic of major depression namely in the endogenous sub-type. Sifneos (1987) has suggested that anhedonic individual may or may not be alexithymic, while an alexithymic individual is always anhedonic. Kazdin (1989) has shown that anhedonics have a more internalized locus of control than non anhedonics but several studies have shown a more externalized locus of control in depressives than in normals. The aim of the present study is to clarify the relationships between these three dimensions first in unipolar major depressives compared to normals and secondly between the preceding depressives dichotomized into low and high anhedonics.

**Method:** Subjects and rating scales: 59 inpatients filled out the RDC criteria for unipolar major depressive disorder and 56 healthy subjects constituted the control group. They were not significant differences between the two groups concerning the age and the sex-ratio. The subjects completed the Physical Anhedonia Scale (PAS), the Toronto Alexithymia Scale (TAS), the Internal Powerful others Chance scale (IPC). Statistical analysis: First the depressives and the normals were compared on the preceding scales using Student's t tests, secondly the major depressives were divided into two sub-groups using the PAS score. The depressives with a score higher than 29 were included in the anhedonic major depressive group (ANH) and those with a score lower than 19 were included in the hedonic major depressive group (HED). The sub-groups were compared on the preceding scales using Student's t tests. **Results:** the PAS and TAS scores of the major depressives were significantly higher than that of the normals. The Power others and Chance scores of the IPC were significantly higher in the depressive group than in the normal group. The Power others and Chance scores of the ANH were significantly higher than that of the HED. The TAS score of the ANH was higher than that of the HED but the difference was not significant.

**Conclusion:** Unipolar major depressives were more anhedonic and alexithymic than controls and showed an externalized locus of control. Anhedonic major depressives were more alexithymic and externalized than hedonic major depressives.