

### EFFECT OF HYPOTHERMIA ON EPILEPTIFORM RESPONSE IN CA1 REGION OF HIPPOCAMPUS

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In conditions of hypothermia of rats a clear lengthening of the afterdischarge (AD) — an epileptiform response consisting of bursts of high-amplitude population spikes produced by electrical stimulation — takes place in dentate gyrus (S Belugin & A Kubarko, 1995, *Homeostasis.*, 36, Suppl. 1, Part 2, 13). To test whether such effect of low temperature covers next pyramidal-cell layers in the hippocampal circuit, we examined the AD duration in the CA1 region of hippocampus. The effect of hypothermia was investigated in nine urethane-anesthetized (1.2 g/kg) rats. The AD in the CA1 region was induced by electrical stimulation (trains of 10 s, pulse width 0.1 ms, biphasic, 80 V, frequency 20 Hz, every 10 min) of the CA3 region (contralateral to the CA1 region). Cooling of the rats to 32.9°C–33.6°C (0.4°C–0.5°C per 10 min) led to a tendency of the AD duration increase from  $15 \pm 2$  s (mean  $\pm$  s.e.m.,  $n = 23$ ) to  $24 \pm 4$  s ( $n = 9$ ) ( $P > 0.05$ ). Reverse warming of the animals to 37.1°C–37.8°C shortened the AD duration by  $11 \pm 2$  s ( $n = 14$ ) ( $P < 0.01$ ). The correlation between the AD duration in the CA1 region and body temperature was much poorer ( $r = -0.27$ ,  $n = 175$ ,  $P < 0.001$ ) than for the dentate gyrus ( $r = -0.61$ ,  $n = 149$ ,  $P < 0.001$ ) and linear regression had slopes  $-3.8$  s on 1°C and  $-11.9$  s on 1°C respectively. These results show that: 1. the afterdischarge strengthening in the CA1 region takes place at hypothermia; 2. the less dependence of the epileptiform activity in the pyramidal-cell layers of the hippocampus on temperature is observed in comparison with the dentate gyrus.

### AMINASINUM DECREASES EPILEPTIFORM ACTIVITY BUT DOES NOT PREVENT ITS STRENGTHENING IN DENTATE GYRUS AT HYPOTHERMIA

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Aminasinum impairs central control of thermoregulation and can cause hypothermia. The strengthening of epileptiform activity evoked in the dentate gyrus (DG) by electrical stimulation was observed in compulsorily cooled rats (S Belugin & A Kubarko, 1995, *Homeostasis.*, 35, Suppl. 1, Part 2, 13). The aim of the study was to evaluate the correlation between duration of the epileptiform activity — after discharge (AD), and values of body temperature in conditions of central thermoregulatory impairment induced by aminasinum. Eleven urethane-anesthetized (1.2 g/kg) white rats were used in the experiment. The anesthetized animals were able to maintain their body temperature within range 35.5°C–36.5°C at room temperature 21°C. After administration of aminasinum at 50 mg/kg (i.p.) rat's body temperature began to fall down already in 15 min (0.5°C per 10 min). The AD in the DG was induced by electrical stimulation (trains of 10 s, pulse width 0.1 ms, biphasic, 80 V, frequency 20 Hz, every 10 min) of the perforant path. Before administration of aminasinum the AD duration was 29 s (mean) and in 10 min after the administration — the AD shortened on  $12 \pm 4$  s (mean  $\pm$  s.e.m.,  $p < 0.05$ ,  $n = 11$ ). The correlation between the AD duration in the DG and values of body temperature (within 36°C–32°C) was negative ( $r = -0.4$ ,  $p < 0.001$ ,  $n = 66$ ), and linear regression had a slope  $-4.1$  s on 1°C. Under conditions of cooling without aminasinum it was observed that strengthening of the AD was three times as much ( $-11.9$  s on 1°C). Partially switched off afferent inflow by spinal cord section on thoracic level did not show any changes in the AD duration and reverse warming of animals shortened the AD. Besides, after administration of aminasinum in no one test was obtained spreading depression usually coupled with high-amplitude spike firing in the DG. These results show that aminasinum reduces electrically induced epileptiform ac-

tivity in the dentate gyrus and suppresses spreading depression but does not block the modulating effect of temperature on the epileptiform activity.

### FAMILY VIOLENCE AMONG PSYCHIATRIC IN-PATIENTS AS MEASURED BY THE CONFLICT TACTICS SCALE (CTS)

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The aim of this study was to analyse the frequency and pattern of family violence in a group of psychiatric in-patients by using the Conflict Tactics Scale. The study is based on a consecutive series of 55 married or cohabiting psychiatric in-patients treated at Huddinge Hospital, Stockholm, Sweden in 1994 and indicates that these patients use violent methods more often than the population in general when conflicts arise between spouses. The most common violent methods were pushing and grabbing the spouse, and these behaviours appeared in approximately 25 per cent of the marriages during the past year and in 50 per cent during the whole marriage. Kicking and slapping and even more violent methods like beating up and choking were not uncommon either. The use of a weapon was seldom reported, however. Further, our study shows that males and females use similar types of both violent and non-violent strategies when trying to solve conflicts between spouses. Depressed patients use both non-violent and violent methods more seldom than non-depressed while the opposite is true for patients with a personality disorder and schizophrenics. Psychosocial stressors seem to be of limited importance in this context while poor general functioning is associated with destructive ways of trying to solve conflicts between spouses. However, there are no Scandinavian population-based studies establishing the frequency and type of violence used when trying to solve conflicts between spouses. Thus, there is a need for such studies and our present investigation supports the American experience that the Conflict Tactics Scale is a usable and easily administrated instrument for population-based studies.

### IMPORTANCE DU CORPS ET DE L'ANAMNÈSE SEXUELLE DANS L'ÉTABLISSEMENT D'UN DIAGNOSTIC DE STRUCTURE PSYCHIQUE AVANT LA THÉRAPIE

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La thérapie analytique procède par une anamnèse générale de quelques entretiens pour poser un diagnostic de structure du patient, c'est à dire une hypothèse sur la problématique centrale du sujet, celle autour de laquelle s'articule les autres, celle qui produit des résistances spécifiques tout au long du traitement. Ces résistances doivent être élaborées dans le cadre d'une relation de transfert avant que le sujet ne puisse s'ouvrir à d'autres aspects de sa personne. J'ai proposé d'enrichir cette anamnèse classique par un questionnement sexuel spécifique initial et un regard sur, une prise en considération du corps réel du sujet tant au repos qu'en mouvement.

L'homme est avant tout un être sexué. Beaucoup de sa pathologie psychique résulte d'une intégration inadéquate de ses pulsions sexuelles à sa dimension sociale. Sa sexualité se manifeste dans des conduites, des fantasmes et des rêves spécifiques souvent passés sous silence durant toute la thérapie par peur et par honte (tant chez le sujet que chez le thérapeute...) qui en disent long sur sa structure.

L'inconscient freudien se trouve dans les contenus et modalités de langage et tout autant dans notre expression corporelle, nos postures, notre mimique, l'expression de notre regard, notre voix etc. D'où l'intérêt fréquent d'une "lecture corporelle" précédant un diagnostic. Cette lecture peut être tant "objective" (scientifique) que "intuitive" (contre transférentielle).

Le corps au repos d'un sujet nous en apprend beaucoup sur la façon dont son histoire s'est inscrite dans sa chair, sur sa présence au monde, les affects profonds qu'il véhicule, son degré d'unité ou de dysharmonie (fragmentation).

Si on met le corps du sujet en mouvement, de façon non douloureuse, il émerge fréquemment des contenus spécifiques, chargés émotionnellement, souvent régressifs, qui vont indiquer le type de transfert central, les résistances, tant psychiques que corporelles. J'ai nommé cela un processus *d'activation transférentielle*. L'anamnèse sexuelle et l'exploration corporelle aident ainsi à situer et formuler la problématique centrale du sujet, ce qui va constituer pour le thérapeute une sorte de fil rouge bien nécessaire au long du processus, lors des inévitables périodes de confusion et de doutes qui accompagnent la thérapie.

De nombreux exemples illustreront cette théorie et cette pratique thérapeutique.

### DEPERSONALIZATION: PSYCHOPATHOLOGY AND PHILOSOPHY

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The present is an attempt to discuss the "double" nature of depersonalization (D) as a syndrome and as a psyche phenomenon. D in 117 patients were assessed. D may be considered as a developmental disorder of self-awareness, characterizing by features of distortion of puberty identity crisis. Three types of D correlating with disturbances of correspondent dimensions of self-awareness development are described: vital, derealization, mental. The psychopathological root of D as a syndrome probably is a quality of vitality — a vulnerability of primary dimension of self-awareness development, so called "feeling of existence". Continuum of vital, protopathic sensations could be regarded as a line, connecting D with obsessions, perception and delusional disorders. Two kinds of such disorders may be distinguished: somatofom, correlated with body image and "ideation" correlated to mental activity. Phenomenological root of D as a psyche, metaphysical phenomenon seems to be considered as a kind of "virtual reality Self", creating by selfreflection in aspiration to comprehend the essence of human being and the sense of being for constructing the actual "Self-true" reality.

### PSYCHOMETRIC FEATURES OF THE FRENCH VERSION OF DEFENSE STYLE QUESTIONNAIRE (DSQ)

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Bond et al. [1] developed a self questionnaire measuring empirically conscious derivatives of defense mechanisms. According to them, the term defense mechanisms is used to describe not only an unconscious process, but also behaviour that is either consciously or unconsciously designed to reconcile internal drives to external demands. DSQ has been translated and validated in many different languages. Original analysis yielded 4 factors called Defense Styles (DS): (I) Maladaptive action pattern (II) Image distorting style (III) Self sacrificing style (IV) Adaptive defense style. Depending on environment and language, these factors do not contain exactly the same individual mechanisms of defense (MD), but remain clinically relevant. DSQ discriminates mature and immature DS. *Objectives:* Determine if the french version of DSQ has (1) a similar structure than the original version (2) Internal consistency (3) Grouping of MD in clinically pertinent DS (4) Correlation with Defensive Functioning Scale (DFS) (DSM-IV) (4) non patients use more mature DS. *Preliminary results:* Factor analysis of probants (n = 68) sample yielded 4 factors ranging from mature to immature DS (I) Acting out, Help rejecting complaining, Regression, Inhibition, Projection, Somatization, Projective

identification (II) Suppression, Omnipotence, Isolation, (-) Pseudo altruism (III) Sublimation, Reaction formation, (-) Splitting (IV) Anticipation. DSQ scores on factor I are significantly higher (mean diff. = 1.12, DF = 187, t-value = 6.16, p < 0.0001) in outpatients group (n = 113) than in probants (n = 76). Factor I score is negatively correlated with score on DFS, if patients at the level of "dysregulation of defense" level are excluded (n = 40, r = -0.40, p = 0.01). Patients with psychotic functioning tend to underscore MD on DSQ. Scores on other factors are not different in the two groups. *Conclusion:* Factor structure of the french version is similar to the original scale, although minor differences in individual MDs are present. DSQ cannot be used with patients functioning at a dysregulation of defense level, probably because of denial and lack of insight. DSQ remains an easy and economical way to discriminate mature and immature defense style in populations of "neurotic" patients. Defense Functioning Scale of DSM IV seems difficult to use without specific training.

[1] Bond M, Gardner ST, Christian J, Siegel JJ: An empirically validated hierarchy of defense mechanisms. *Arch Gen Psychiatry* 1983; 40: 333-338.

### THERAPEUTIC DIALOGUE IN PSYCHIATRY AND PROBLEMS OF CONSCIOUSNESS

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In our clinical practice we deal with the inner world of patients. Therefore the spiritual life of a human being is the initial point and object of any investigation in psychopathology.

From this point of view all the problems of general psychopathology centre round a way of penetrating into man's consciousness.

The only reality comprehensible for us is consciousness of a human being that may be understood through real process of communication between doctor and patient.

Since communication is realised between subjects, intersubjectivity is intrasubjective by its nature, that is a part of the theory of subject, i.e. "ego".

However speaking about "ego" we are hardly able to understand the initial stages of any communication both normal and pathological without theoretical grounds for understanding the mechanisms of consciousness.

In our work of 1991, following Bahtin's viewpoint, we showed that normal, clear consciousness is a dialogue between architectonic structures "ego" and "second self" while chronological shifts of the dialogue create man's feelings and thoughts.

Theoretical foreground for understanding of pathological dialogue or monologue within the framework of the new concept of consciousness enables us to see the role of psychiatrist at all the stages of the therapeutic dialogue with patient.

On the one hand psychiatrist diagnoses the state of patient's consciousness and on the other hand knowing the new methods psychiatrist is able to solve the problem of reparation of patient's dialogical consciousness by means of communication with him.

### PERSISTENCE, VANISHING AND DEVELOPMENT OF RESPONSIBILITY AND DANGEROUSNESS. THE ITALIAN CASE

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The etymological reconstruction of the meaning of the terms Responsibility and Dangerousness helps to show that the convergence between the sense-evolution of these words and the effects of the "180 Law" promulgated in 1978 (law which did not include in its text the word Dangerousness and which did reduce the Responsibility of psychiatrists) produced in the psychiatric field a progressively increasing