

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 ± 2 s (mean \pm s.e.m., $n = 23$) to 24 ± 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 ± 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 ± 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).