AN. IL6R, IL6ST, IL1B, IL2RB and TGFB1 differentiate two type of AN: the restrictive type of AN and binge-eating type of AN. IL1B differentiates the restrictive type of AN and the reference group and TGFB1, IL6ST and IL1B differentiate the binge-eating type of AN and the reference group.

Conclusion: Orexigenic and anorexigenic peptides are responsible for eating behavior but not for food intake.

P0312

Animal models: Possible avenue to understanding schizophrenia

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Schizophrenia is one of the most devastating neuropsychiatric disorders. One of the most consistent findings in schizophrenia is a decrease in cell number and volume of the medial dorsal nucleus (MD) of the thalamus which has reciprocal connections to the prefrontal cortex, another region affected in schizophrenia. During development, the MD aides in the differentiation and maturation of pyramidal cells in the prefrontal cortex. To better understand the role of the MD in schizophrenia we lesioned the MD of postnatal day 4 rats and examined their prefrontal cortex as adults. In rats, the MD projects to dorsolateral anterior (human area 9), medial prelimbic (human area 32) and Cg-1 (human area 24). We hypothesized that a lesion of the MD would lead to morphological changes in all three regions similar to that observed in humans. Using a Golgi stain we counted the number of primary and secondary dendrites and determined spine density in the three regions. Analysis of layers III and V pyramidal cells showed a significant reduction in primary dendrites III/V (Cg-1 25%/23%, prelimbic 25%/25% and dorsolateral 24%/15%) and secondary dendrites (Cg-1 40%/34%, prelimbic 40%/32% and dorsolateral 41%/30%). Using two different counting methods we observed that spines on primary and secondary dendrites were significantly reduced for both laminas for all three regions. These current data suggest that a lesion of the MD early in development affects dendritic morphology in the prefrontal cortex similar to that observed in schizophrenia making this model a good candidate for better understanding of schizophrenia.

P0313

Neurobiological model of unitary psychosis

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Background: In psychiatry there exist, parallel trends of splitting and clumping of disorders. Former represents dichotomous Kraepelinian trend and latter stands for integrated approach of unitary psychosis .Advancement of biochemical studies and genetics have provided some evidences in favor of unitary psychosis.

Method: Authors made an internet search at various databases websites including pub med, and Blackwell synergy using, early psychosis, prodrom , neuroprotection, apoptosis as key words. It was followed by manual and internet study of authentic psychiatric journals.

Results: Anatomical, functional and neurochemical studies of brain reveal structural changes in early psychosis.

In schizophrenia, pathological process is progressive. Brain volume loss continues even after onset of overt symptoms.

Study of subjects in prodromal phase shows 15-point drop in GAD. Significant proportion also met criterion of anxiety 86% depression 76% low energy 62% and, social with drawl 71%.

Discussion: Unitary psychosis symbolizes concept of unity in diversity. Neurodevelopmental apoptotic process has its own direction that manifests in form of affective symptoms, anxiety symptoms, obsessive symptoms cognitive deficits, positive psychotic symptoms and ends with negative symptoms. It is assumed that neurodevelopmental process move from lower to higher centers of brain. Neuroprotection during emerging phase of psychotic disorder can delay the onset. Neurochemical studies shows that SSRIs atypical antipsychotic, anticonvulsants, and lithium has antiapototic properties which modulate the progression This suggests that apoptotic process is the thread that connects apparently different disorder is unitary psychosis.

Conclusion: Neurobiological model can account for unitary psychosis.

P0314

Empathy and the mirror system: Findings from a novel affective startle study

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Background: The Mirror System (MS) may facilitate emotional processing, including the experience of empathy. We explored MS involvement in emotional processing using a novel affective startle paradigm and examined whether results were associated with empathy levels in a group of healthy participants.

Methods: Participants (n=69) viewed pictures that were divided into emotionally positive, neutral and negative categories. Pictures were preceded by emotionally congruent primes: half the primes consisted of a videoclip showing hand-object interaction designed to recruit the MS and half consisted of a control sequence showing static images of the interaction. Acoustic startle probes were presented during picture viewing and startle eyeblink responses were recorded. Participants were divided into high and low empathy groups based on their responses for the empathy subscale of the I7 questionnaire.

Results: Startle amplitude was inhibited during positive picture viewing and potentiated during negative picture viewing when pictures were primed with moving videoclips compared to static controls. The biggest difference between amplitude associated with moving and static primes was found in the positive condition ($p=0.009$). The high empathy group exhibited a greater difference in startle amplitude between the moving and static conditions than the low empathy group for positive pictures ($p=0.04$).

Conclusions: Our results suggest that the MS modulates emotional processing, as reflected by enhanced startle reactivity when pictures were primed with moving videoclips designed to recruit the MS. This effect was more marked in the high empathy group, suggesting

https://doi.org/10.1016/j.eurpsy.2008.01.981 Published online by Cambridge University Press

that high empathisers may be more sensitive to MS involvement in emotional processing.

P0315

Interaction between health behaviour, mental distress and the polymorphism of the serotonin transporter gene among adolescents in Oslo, Norway

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Background and Aim: We have recently found an association between smoking and mental distress in a three year follow up study among Norwegian adolescents. Earlier studies have demonstrated that the serotonin transporter gene interact on the association between negative life events and depression.

The aim of this study is, in stratified analyses by sex, to investigate whether there is a similar interaction of the serotonin transporter genotype on the relationship between smoking and mental distress.

Method: All 10th graders in Oslo in 2000 and 2001 (n=7343, 88%) filled in questionnaires during school classes. The 2001 cohort (n = 3811) constituted the baseline. Of the participants in the baseline study 2489 (65%) participated in the follow-up. The response rate was 58% in boys and 74% in girls. The Hopkin's Symptom Cecklist-10 was used to measure mental distress. At follow up almost all participants provided genetic material using a cyto-brush on the buccal mucosa. The tag SNPs were analysed with Taqman MGB.

Results: There was a significant interaction effect between the different genotype alleles and smoking among girls (F=4.0, p=0.019), but not among boys (F=0.8, p=0.44). Girls that are smoking daily with the long gene allele variant had lower mental distress scores than those with the short allele variant. Those with the heterozygote variant had scores that were between those with the short and long variant.

Conclusion: There is an interaction effect for the serotonin transporter genotype among adolescent girls, but not in boys in the relationship between smoking and mental distress.

P0316

Psychophysiological markers of the patrimonial dominant

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Objects: One of the most often reasons of anomalies development of patrimonial activity is absence of the generated patrimonial dominant.

Methods: The study has been carried out on the basis of a maternity hospital of Chelyabinsk city. Group of 38 pregnant females sorts on term (38-40 weeks). It was lead monopolar electroencephalography on 11 channels with epselateral ear referent electrodes. Record EEG was carried out on standard procedure. The correlation analysis was carried out with the help of statistical package SPSS version 11.0.

Results: Epy interrelation between anomalies of patrimonial activity and average frequency of a beta-rhythm is established at opening eyes (r = 0,450 at p=0,005), an index of a teta-rhythm (r =-0,419 at p=0,009) at closing eyes in left frontal assignment F1.

Conclusions: The revealed direct interrelation of increase of average frequency of a beta-rhythm in the left frontal assignment and increases in probability of occurrence of anomalies of patrimonial activity allows to specify a hypothesis about connection of expressiveness of high-frequency activity in frontal zones of a brain with formation of a patrimonial dominant.

P0317

Serotonin transporter gene and adverse life events in adult ADHD

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Childhood Attention deficit hyperactivity disorder (ADHD) symptomatology persists in a substantial proportion of cases into adult life. ADHD is highly heritable but the etiology of ADHD is complex and heterogeneous, involving both genetic and non-genetic factors. In the present paper we analyzed the influence of both genetics and adverse life events on severity of ADHD symptoms in 110 adult ADHD patients. Subjects were genotyped for the norepinephrine transporter (NET), the Catechol-O-methyltransferase (COMT), the serotonin transporter promoter polymorphism (SERTPR) and the more rare A/G variant within SERTPR. Three main outcomes were obtained: (1) adverse events showed a small but positive correlation with current ADHD severity; (2) NET, COMT and the A/G variant within SERTPR were not associated with ADHD severity; (3) taking into account stressors, the long (L) SERTPR variant showed a mild effect on ADHD, being associated with an increased severity, particularly as regard affective dysregulations; on the other hand, in subjects exposed to early stressors, it showed a protective effect, as compared to the S variant (see table). In conclusion, our data support the role of environmental factors in adult ADHD symptomatology. SERTPR may be involved in some features of the illness and act as a moderator of environmental influences in ADHD.

Total BADDS scores	β	p
Nr. of childhood adverse life events	1.63	0.022
Presence of the SERTPR*S allele	0.34	n.s.
Presence of the SERTPR*L allele	0.68	0.024
Nr. of life events x presence of the SERTPR*S allele	-0.68	n.s.
Nr. of life events x presence of the SERTPR*L allele	-1.19	0.037

Table. **The effect of number of childhood stressors and SERTPR on total BADDS scores (multiple regression analysis).** SERTPR =serotonin transporter promoter polymorphism; BADDS= Brown Attention Deficit Disorder Scale.

P0318

Depression trajectories and medication treatment during pregnancy: Impact on neonatal outcomes

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Aims: This study explores the interplay of maternal depressive symptoms and use of antidepressant medication during gestation on the intranatal development of the infant limbic-hypothalamic-pituitary axis (LHPA). Infant neurologic markers at two weeks of

https://doi.org/10.1016/j.eurpsy.2008.01.981 Published online by Cambridge University Press