

During the last 15 years we have seen a dramatic increase in the administration of effective drug treatment for anxiety disorders and major depression due to the introduction of SSRIs. Lately psychological treatments has been shown to be similarly effective in these conditions. Thus evidence from repeated randomized clinical trials (RCT) shows that CBT is an evenly effective alternative to SSRIs for major depression and anxiety disorders. However, due to limited availability of skilled CBT therapists we have an effective alternative to drug treatment out of reach for most patients regardless of preferences.

Fortunately, CBT provided in self-help-based approaches seems to be effective for e.g. depression, panic disorder, phobias, depression, eating disorders, PTSD and social phobia. A significant number of patients may however find it difficult to complete the treatment on their own. Thus Internet treatment with CBT in self-help format accompanied with minimal therapist contact by email seems to be a cost effective procedure to provide effective treatment to an increasing number of patients. This approach may to some extent overcome the limitation in therapist number and increase treatment accessibility. Patients may still enjoy the benefit of an individual therapist contact and thus improve the number of treatment program completers. Results from RCTs with Internet treatment in clinical settings with patients referred from general practitioners will be provided. Moreover, issues of patient selection/recruitment, web-technology and treatment limitations and clinical impressions of treating patients in this way will be discussed.

S39.03

Psychotherapy on the internet: How does it work concretely?

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Today, internet-based technologies are used in all phases of psychosocial services. Current psychotherapeutic applications focus on the implementation of traditional approaches in the Internet. For instance, self-help material is posted onto the net, therapies are conducted via email, and groups meet in virtual chatrooms. However, recent advancements in web-based technologies are providing even greater opportunities for psychotherapy on the Internet. Today, many different aspects of psychotherapy on the Internet can be provided on a single integrated Web platform.

Recently, we have created an Internet platform that offers various aspects of a cognitive behavioral approach to social phobia. This includes an interactive self-help guide, contact with therapists, a continuous monitoring and feedback of patient response, as well as collaborative elements, offering patients the opportunity to share their experiences with other patients. The aim of this presentation is to provide insight into the concrete application of such a platform. Experiences, pitfalls and opportunities are discussed along with the primary results of a controlled study.

S41. Symposium: GENES, ENDOPHENOTYPES AND TREATMENT OF ADULT ADHD

S41.01

Association of response to methylphenidate in adults with ADHD with a polymorphism in SLC6A3 (DAT1)

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Background: During this presentation, the first pharmacogenetic study on response to methylphenidate (MPH) in adults with ADHD will be reported.

Methods: We performed a stratified analysis of the association between response to MPH, assessed under double-blind conditions, in 42 adults with ADHD, and polymorphisms in the genes encoding the dopamine transporter, SLC6A3 (DAT1), the norepinephrine transporter, SLC6A2 (NET), and the dopamine receptor D4, DRD4.

Results: Polymorphisms in the DRD4 and the SLC6A2 (NET) genes were not significantly associated with the response to MPH treatment; however, the VNTR polymorphism in the 3'untranslated region of SLC6A3 (DAT1) was significantly associated with an increased likelihood of a response to MPH treatment (odds ratio 5.4; 95% CI 1.4-21.9) in heterozygous 10-repeat allele carriers in comparison with the 10/10 homozygotes: 52.2% of the participants heterozygous for the 10-repeat allele improved significantly on MPH treatment whereas only 22.2% of the 10/10 homozygous individuals did.

Conclusions: This study confirms that the SLC6A3 (DAT1) genotype may have an influential role in determining the response to MPH in the treatment of ADHD. The SLC6A3 (DAT1) gene might be a factor worth evaluating further in the future regarding choice of treatment and possibly dose adjustment.

S41.02

Attention-deficit/hyperactivity disorder endophenotypes - an overview

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Attention-deficit/hyperactivity disorder (ADHD) is a clinically heterogeneous, highly heritable and genetically complex disorder. The pathways from genes to behaviour are still unknown. Endophenotypes, or intermediate phenotypes that are more closely linked to the neurobiological substrate than the core symptoms of ADHD, may help to disentangle these complex relationships between genes and behaviour and to clarify its etiology and pathophysiology. Heritability and stability represent key components of any useful endophenotype. Various other criteria for the selection of useful endophenotypes have been proposed. A review of the current state of the research on potential endophenotypes for ADHD will be given.

S41.03

Genes and neurocognitive performance: are the two related in adult ADHD?

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Background and Aims: Studies in children suggest that neurocognitive performance is a possible endophenotype for ADHD. We wished to establish a first connection between key genetic polymorphisms and neurocognitive performance in adults with ADHD.

Methods: We genotyped 45 adults with ADHD at four key candidate polymorphisms for the disorder (DRD4 48 bp repeat, DRD4 120 bp duplicated repeat, SLC6A3 40 bp VNTR, and COMT Val158Met). We then sub-grouped the sample for each polymorphism by genotype or by the presence of the (putative) ADHD risk allele and compared the performance of the subgroups on a large battery of neurocognitive tests.

Results: The COMT Val158Met polymorphism was related to differences in IQ and reaction time, both of the DRD4 polymorphisms (48 bp repeat and 120 bp duplication) showed an association with verbal memory skills, and the SLC6A3 40 bp VNTR polymorphism could be linked to differences in inhibition.

Conclusions: Our findings contribute to the complicated search for possible endophenotypes for (adult) ADHD.

S41.04

The possible association, in adolescence, between attention deficit and hyperactivity disorder and attempted suicide – a pilot study

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Adolescent suicide is a worldwide troubling phenomenon that has high comorbidity, including impulsivity, depression, and personality disorders. Attention Deficit Hyperactivity Disorder (ADHD) includes attention, impulsivity and hyperactivity. Comorbidity includes depression and substance abuse, and has a higher rate in adolescents and adults. Studies considering the association between these phenomena are surprisingly rare. This pilot study estimated the percentage of ADHD in a population of adolescents who attempted suicide. Population included all adolescents (12-18 yrs.) who were brought to local ER after attempting suicide. Assessment included an interview according to the DSM-IV criteria, the Strengths and Difficulties Questionnaire parents (SDQ-P) the Conners' Rating Scale parents (CRS-P), and Kiddie-SADS. Test Of Variables of Attention (TOVA) with methylphenidate (MPH) challenge was done after the clinical evaluation to those diagnosed as ADHD.

Results: 45 suicidal adolescents were registered in the ER and were assessed. 23 adolescents completed the assessment. Male: female ratio was 5:18 accordingly. The prominent diagnoses included ADHD (65%), depression (43%), cluster B personality disorders (35%), and Conduct Disorder (13%). ADD/ADHD ratio was 43/22 (66%:34%). Some suffered from more than 2 diagnoses and 1 had no diagnosis at all. 47.6% were diagnosed as hyperactive by SDQ-P, and 70% as ADHD by CRS-P. 14/15 (93%) were evaluated as ADHD by TOVA and most responded well to MPH. Five patients

were diagnosed before the study as ADHD, but only three were medicated. These results, though primary, suggest a significant relationship between the two disorders and indicate a need to further study this correlation

S41.05

A 6 month study of the adherence, effectiveness and safety with methylphenidate adults with ADHD

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Background and Aims: Once daily (q.d.) osmotic release oral system (OROS) methylphenidate has demonstrated to be as efficacious as three times a day (t.i.d.) immediate release (IR) methylphenidate in children with attention deficit hyperactivity disorder (ADHD) but with superior adherence. However, although ADHD continues into adulthood, data in adults are lacking. Effectiveness, adherence to treatment and patient's satisfaction were studied in adults with ADHD before and after switching from methylphenidate IR to OROS presentation.

Methods: Seventy newly diagnosed adults with ADHD were treated with t.i.d. methylphenidate IR and, after 3 months, were switched to q.d. OROS formulation and were followed up during 3 additional months. Effectiveness was evaluated with the ADHD Rating Scale (ADHD-RS) and the Clinical Global Impression Improvement (CGI-I) Scale, adherence to treatment with the Simplified Medication Adherence Questionnaire (SMAQ) and patient satisfaction with the treatment. Effectiveness, adherence and satisfaction were compared before and after treatment switch.

Results: ADHD-RS score changed from 34.6 (10.9) at baseline to 25.1 (9.1) while receiving IR methylphenidate and to 15.1 (7.2) while on OROS formulation. Furthermore, methylphenidate switch was associated with an increase of the rate of patients repondents to treatment, from 28.6% to 91.4%. The administration of methylphenidate OROS was associated with better scores in all items of the SMAQ. Methylphenidate OROS was preferred by 97% of patients. All differences were statistically significant. In conclusion, switch from t.i.d. IR to q.d. OROS methylphenidate was associated with an improvement in adherence, patient's satisfaction, and effectiveness.

S42. Symposium: EPOS-FIRST RESULTS OF THE COMPLETED STUDY

S42.01

The European prediction of psychosis study - concept and design

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