

is often a strong family history of the DQ1 (6) B1*0602 negative syndrome. As yet, no other disease susceptibility loci have been identified.

Many subjects with the narcoleptic syndrome do not attend a sleep disorders clinic or have laboratory investigations. A study of subjects who have undergone diagnostic investigations showed that the accurate clinical diagnosis of cataplexy is the most specific discriminatory feature of the syndrome and should take precedence over any laboratory findings.

SLEEP, OFFENDING AND THE LAW

Peter Fenwick. *Institute of Psychiatry, De Crespigny Park, Denmark Hill, London, SE5 8AF*

With a change in social attitudes which has led to young adults sleeping over in friends' houses, and often in the same room, after parties, there has been an increase in sleep related sexual offending. Sexual offending in sleep can arise because the perpetrator sleepwalks in a sexually offensive way, eg, walking nude through the streets. It can also occur as a direct assault on a sleeping colleague in which contact is made with the sleeper's genitals.

Finally sleepers may be approached by an awake person who requests sexual intercourse. Misinterpretation of sleeping behaviour can lead the perpetrator to believe that the sleeper is awake. A detailed knowledge of sleeping behaviour is required by the examining neuropsychiatrist to decide whether or not the perpetrator had reasons to believe that the sleeping victim had given their consent for the sexual approach. Aggressive attacks are common during either sleepwalking or REM sleep disorders.

Fortunately, assaults leading to serious injury are rare, the law in England interprets sleepwalking as insanity. This has the advantage that the normal sleepwalker is stigmatized as being insane.

HYPNOTICS AND DAYTIME PERFORMANCE

I. Hindmarch. *Human Psychopharmacology Research Unit, University of Surrey, Milford Hospital, Godalming, Surrey, GU7 1UF*

It is now widely accepted that daytime tiredness, resulting from, among other things, sleep debt, sleep apnoea and insomnia is a major determinant of road traffic accidents and fatalities.

Most of the pharmacological substances used to manage patients with sleep disturbance (hypnotics, antihistamines, antidepressants) are, by their very nature, powerful sedatives. The psychopharmacological actions of many putative sleep inducers cause residual sedative sequelae which can interfere with daytime functioning on a variety of psychometric analogues of the activities of daily living.

The residual actions of ligands of the GABA-Cl ion receptor, sedative antidepressants and antihistamines on daytime performance will be reviewed and evidence presented to show that sedative tricyclic antidepressants old antihistamines and certain benzodiazepines destroy the integrity of daytime function in populations of sleep disturbed patients. At the same time it will be demonstrated that specific benzodiazepines, cyclopyrrolones and imidazopyridines have few, if any effects on daytime performance.

THE PHARMACOLOGY AND THERAPEUTICS OF SLEEP

M.H. Lader. *Institute of Psychiatry, De Crespigny Park, London SE5 8AF*

The complaint of insomnia is common occurring in about 5% of young people but rising to 35% in those over 65. It may be short term or chronic. Most common causes of insomnia fall under one of "5 P"

headings: Physical, Physiological, Psychological, Psychiatric, and Pharmacological. If non-drug methods of treatment are inappropriate or ineffective, hypnotic medication is indicated.

Currently, hypnotic medication comprises a few older drugs such as chloral, antihistamines, often available without prescription, a range of benzodiazepines, and two newer benzodiazepine-like drugs, zopiclone and zolpidem. Some benzodiazepines used as hypnotics such as nitrazepam are long-acting, producing residual effects the next day and accumulating, to toxic levels in the elderly. The shorter-acting compounds such as triazolam may result in rebound insomnia on discontinuation. Adverse neuropsychiatric reactions such as depression and amnesia may occasionally be reported. Abuse of benzodiazepines is an increasing worldwide problem. Zopiclone is short-acting, zolpidem even shorter-acting, and neither is associated with appreciable residual effects. They also do not disrupt sleep patterns as the benzodiazepines do. Zaleplon, a drug in development, is ultra-short-acting, also with beneficial effects on sleep patterns. All these newer drugs need careful monitoring to assess any dependence or abuse potential.

The use of hypnotic medication in short-term insomnia is uncontroversial. If the cause of the insomnia is identifiable and self-limiting, then the use of a short-acting hypnotic is indicated for a few nights. If, however, the insomnia is, or is likely to become, long-term, the use of hypnotic medication may also become long-term. It is debatable whether the risks of long-term use outweigh any therapeutic advantages. Non-drug strategies should be vigorously pursued before resort to medication, unless the patient is greatly distressed by the insomnia, in which case intermittent or p.r.n. use may be most appropriate.

NORMAL SLEEP PHYSIOLOGY

T. Roth. *Henry Ford Hospital, Sleep Disorders and Research Center, 2921 West Grand Boulevard, Detroit, Michigan 48202*

Sleep is a behavior characterized by very low level of motor activity, a stereotypic posture, reduced responsibility to external stimulation, and reversibility. These measures are traditionally used to define physiological sleep in the EEG, the EOG, and the EMG. In wake, the EEG alternates between low voltage fast activity (10–30 cps) and a sinusoidal 8–12 cps pattern called alpha. NREM sleep is characterized a progression for mixed frequency fact activity with occasional sleep spindles to predominance of slow high amplitude lower (delta activity). Eye movements are rare and EMG is low to moderate. During REM sleep, the EEG reverts to a low voltage, mixed frequency pattern similar to that of Stage 1. Bursts of prominent rapid eye movements appear. The background EEM is virtually absent, but many small muscle twitches may occur.

NREM and REM sleep alternate cyclically through the night. Except in certain pathological conditions, a night of sleep begins with about 80 minutes of NREM sleep, followed by a REM period of about ten minutes. This 90 minute NREM-REM cycle is then repeated about 3–6 times during the night. In the successive cycles of the night, the amounts of Stages 3 and 4 decrease, and the proportion of the cycle occupied by REM sleep tends to increase.

It should be clear from this pattern of NREM and REM sleep that sleep is not the simple, uniform suspension of activity which many had assumed it to be for centuries. Rather, sleep shows a complex, highly organized pattern of diverse physiological variables.

Although the EEG, EOG, and EMG measures do a pretty good job of state discrimination, there are occasions when states are not clearly differentiable. State changes do not switch off and on like light switches. Rather, they change more or less gradually, which can make it difficult to draw very sharp dividing lines between states. Even more vexing is the fact that the different processes may change at different rates. For example, during the transition from

wakefulness to sleep, there may be several minutes when the EEG looks like that of wakefulness, but awareness of the environment is lost.

S82. Personality disorders: basic and clinical aspects

Chairmen: A Dahl, C Pull

ATTACHMENT PATTERNS (APs) AND DEFENSE MECHANISMS (DMs) IN PERSONALITY DISORDERS (PDs): A PRELIMINARY STUDY

L. Barone¹, V. Lingiardi², C. Maffei². ¹ Education Department, University of Trieste, via Tigor 22, Trieste, Italy; ² Istituto Scientifico Ospedale San Raffaele, Department of Neuropsychiatric Sciences, University of Milan School of Medicine, via Prinetti 29, 20127, Milano, Italy

One of the most central hypothesis in the field of attachment theory suggests that adults' mental representation of childhood attachment experiences strongly influences the quality of interpersonal relationships. Further information comes from DMs evaluation, which offers a clinical picture of the subject's way of handling conflicts and stressors. This integrated approach can make easier both diagnostic definition and treatment options.

In the clinical domain, a promising line of research is the application of the Adult Attachment Interview (AAI, [1]) and the Defense Mechanism Rating Scale (DMRS, [2]).

The Authors present a preliminary study on the evaluation of APs and defense styles in a sample of PDs. The data concerning attachment are collected using AAI. The data concerning defenses are collected using DMRS. The evaluators have been trained by Mary Main for the AAI and by Christopher Perry for the DMRS.

The aim of this study is to analyze the occurrence of different APs and DMs profiles in subjects with PDs. The study is part of a more comprehensive research project on clinical assessment.

The Authors discuss the two evaluation systems (AAI and DMRS) for guiding clinical inference in the identification of specific APs and DMs. The discussion of these two instruments is followed by their application. Five patients have been randomly selected and interviewed. The transcriptions of their clinical interview have been rated following AAI and DMRS criteria. Our preliminary data show a relation between insecure patterns of attachment and specific immature defenses clusters. The comparison among PDs (DSM-IV) diagnoses, attachment categories and DMRS total scores are discussed.

[1] Main M, Kaplan N, Cassidy J (1985), Security in infancy, childhood and adulthood: A move to the level of representation. Monographs of the Society for Research in Child Development, 50 (1-2, Serial No. 209).

[2] Perry JC (1991), Defense Mechanisms Rating Scale. Cambridge Hospital-Harvard Medical School, Boston.

PSYCHODYNAMIC CONFLICTS IN DSM-III-R PERSONALITY DISORDERS

C.A. Guldberg, E. Dramsdahl, A.A. Dahl. Institute Group for Psychiatry, University of Oslo, P.O. Box 33, Gaustad, N-0320 Oslo, Norway

Objective: To study the relationship between psychodynamic conflicts and DSM-III-R personality disorders. **Methods:** 171 non-

psychotic subjects between 25 and 45 years of age were interviewed with the Personality Disorder Examination (PDE). Of these, 84 (49%) had a definite DSM-III-R personality disorder. 80 (95%) of these consented to a 50-minute psychodynamic interview, which was audio- and videotaped, and then transcribed in full length. These interviews were then assessed for psychodynamic conflicts with the Psychodynamic Conflict Rating Scales (PCRS). **Results:** Except for Schizoid personality disorder, none of the Cluster A personality disorders correlated with dynamic conflict dimensions. In Cluster B, there was a very strong correlation between Antisocial scores and the Resentment over being thwarted conflict. Borderline, Histrionic and Narcissistic scores correlated with the Object hunger conflict. In Cluster C, Avoidant scores correlated with Counterdependent, Overall gratification inhibition and the Global conflict over expressing emotional needs and anger, as well as negatively with the Object hunger conflict. For Obsessive-compulsive personality disorder scores, there was a trend towards positive correlations with the Dominant goal and Sexual pleasure versus guilt conflicts, as well as a significant correlation with the Object hunger conflict. **Conclusion:** For several of the personality disorders, psychodynamic conflicts seems to play a significant role in the formation of character traits. Our findings may be of importance for targeting psychotherapeutic interventions in personality disorders.

CLINICAL ASSESSMENT OF DEFENSE MECHANISMS USING THE DEFENSE MECHANISM RATING SCALE (DMRS) BY J.C. PERRY

V. Lingiardi, L. Vanzulli, M. Simula, C. Lonati, A. Fossati, C. Maffei. Istituto Scientifico Ospedale San Raffaele, Department of Neuropsychiatric Sciences, University of Milan School of Medicine, via Prinetti 29, 20127, Milan, Italy

This paper touches on the use of the Defense Mechanism Rating Scale (DMRS), an observer-based method, realized by J.C. Perry, which identifies specific defense mechanisms from interview transcripts, video or audio recordings. The DMRS comprehends 28 individual defense mechanisms, hierarchically ordered in 7 clusters from the less mature defenses (Action Defenses) to the most mature ones. A qualitative and quantitative scoring yields a final profile which classes the subject on a scale (range 0 to 7), measuring the Overall Defensive Functioning.

The authors reckon the valuation of the defense style to be very important in the assessment of a Personality Disorder. They present a preliminary study on the interrater reliability (IRR) of a training group learning to use the DMRS from a senior rater directly trained by J.C. Perry. This study is one of the first steps of a multicentric research assessing defenses in patients with Personality Disorders.

Ten patients randomly collected who accepted to participate in the study have been assessed so far by trained clinicians conducting a 50-minute dynamically oriented interview to elicit defenses and conflicts.

Each rater within the training group made independent ratings, based on audio recordings and transcripts, blind to others' ratings. Then five junior raters met in a consensus group conducted by a senior rater, discussing their ratings and forming consensus ratings for each session.

Overall Defensive Functioning	0.85
Total of Defenses	0.79
Mature Defenses	0.81
Obsessional Defenses	0.79
Other Neurotic Defenses	0.88
Minor Image Distortion Defenses	0.94
Disavowal Defenses	0.77
Major Image Distortion Defenses	0.45
Action Defenses	0.79