

movement (REM) sleep and on the fragmented sleep pattern. In conclusion, the antidepressant efficacy of agomelatine may be due to its receptor profile, and it is hypothesized that melatonergic and 5-HT_{2C} receptors may be acting in synergy, thus representing a novel approach to treating depression.

SAT3.03

How the internal clock interacts with mood and depression

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In all life forms, circadian rhythms are defined by a period of approximately 24 hours. The daily light/dark cycle governs rhythmic changes in behavior and physiological and mental functions, ie, in activity, core body temperature, hormones, sleep-wake cycle. All circadian rhythms are driven and controlled by the biological clock, which in mammals is located in the suprachiasmatic nucleus (SCN) of the anterior hypothalamus.

Disruption of circadian organization is a characteristic of a variety of affective disorders, especially major depression, and, circadian abnormalities may constitute a core component of the pathophysiology of depression and may also determine the treatment response.

Depressed patients have documented abnormalities in mood, body-temperature, neuroendocrine secretion, and, most importantly and disabling, in sleep (approximately 90% of patients complain about their sleep). The sleep alterations are mainly related to poor sleep quality and maintenance and to difficulties in maintaining alertness during the day. Polysomnographic recordings show disruption of sleep continuity with prolonged sleep latency, increased wake time during the night, increased early morning wake time, decreased slow-wave sleep, and disinhibition of REM sleep. Most antidepressants can influence the architecture of sleep: SSRIs, SNRIs, and some TCAs (clomipramine) have "alerting" effects whereas others, among them, mirtazapine or trazodone, are sleep promoting often also causing sedation and daytime sleepiness. An important clinical goal in the treatment of major depression would therefore include antidepressants that improve both mood and quality of sleep without impairing daytime alertness.

SAT3.04

Beyond efficacy on the core symptoms of depression: Sex and sleep benefits

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The outcome of depression can be affected after chronic use of antidepressants, because of the spectrum of side effects affecting compliance and quality of life. Among the most disabling side effects are sleep disturbances and sexual dysfunction.

Agomelatine, with its unique pharmacological profile acting as an agonist at melatonergic receptors and as an antagonist at 5-HT_{2C} receptors, improves sleep and does not affect sexual functioning in major depressive disorder. In one study, agomelatine 25 mg, increased slow-wave sleep and normalized its distribution throughout the night ($P < 0.05$) without altering REM sleep. In another study, agomelatine 25-50mg, compared with venlafaxine 75-150 mg, showed similar antidepressant efficacy and demonstrated significant sleep improvement (LSEQ questionnaire) as early as from the first week of treatment ($P = 0.007$ for getting off to sleep and $P = 0.015$ for quality of sleep). This improvement was

maintained throughout the entire 6-week treatment period, with a parallel improvement in daytime alertness.

A comparison of sexual functioning in depressed patients treated with agomelatine or venlafaxine indicated that agomelatine 50 mg had a better sexual profile than venlafaxine XR 150 mg in remitted patients after 12 weeks of treatment on both orgasm and preorgasm measures; both treatments showed comparable antidepressant efficacy. To confirm the favourable effects of agomelatine on sexual functions, a study in healthy volunteers has been carried out and these results will be discussed.

In conclusion, agomelatine is a novel antidepressant that ameliorates disturbed sleep and leaves sexual functioning unaffected, thus improving both depressive symptoms and quality of life of depressed patients.

SAT4 - Satellite symposium: THE INTEGRATED MANAGEMENT OF LONG-TERM PSYCHIATRIC AND MEDICAL NEEDS IN PATIENTS WITH SEVERE MENTAL ILLNESS

Sponsored by pfizer

SAT4.01

Impact of medical comorbidities on patients with severe mental illness

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Patients with schizophrenia and bipolar disorder carry a heavy burden of medical comorbidities. Patients with schizophrenia or bipolar disorder have a life expectancy that is 15 years less than that of the general population. This increased mortality is partly associated with factors inherent to the patients' psychopathology. For example, the risk of suicide is about 20 times higher than that of the general population. However, despite increased psychiatric mortality, cardiovascular disease is the primary cause of death in patients with schizophrenia. While some of this morbidity is the acknowledged result of long-term antipsychotic medication, not all can be explained by pharmacotherapy-for example, patient lifestyle choices may account for at least part of this elevated risk. Smoking, for example, is much more common among patients with schizophrenia than the general population. However, psychotic patients often have undetected general health problems despite a higher than average physician consultation rate, suggesting that there is inadequate monitoring and treatment of the physical health of individuals with mental health problems. This may reflect the fact that mental healthcare is separated from physical healthcare in many countries and access to primary healthcare is often limited for individuals with mental illness.

SAT4.02

Considerations in the treatment of severe mental illness: Differential profiles of antipsychotics

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Second-generation antipsychotic drugs (eg, olanzapine, quetiapine, risperidone, aripiprazole, and ziprasidone) have a reduced incidence of extrapyramidal side effects compared with first-generation neuroleptics, leading to increased use in psychiatric practice. However, some second-generation antipsychotic drugs can increase cardiometabolic risk by increasing risk for weight gain, dyslipidemia, and insulin resistance. Growing evidence, including baseline metabolic data from the CATIE study, indicates that patients with schizophrenia have an increased prevalence of metabolic syndrome (obesity, hypertension, hyperglycemia, dyslipidemia, and hyperglycemia). In CATIE Phase 1 and 2, treatment with different antipsychotic medications is associated with different effects on weight, plasma lipids and risk of hyperglycemia, ranging from clinically significant increases to decreases in metabolic risk. While mortality related to cardiovascular disease is elevated in this patient population, cardiovascular disease risk is under-monitored and under-treated. Current public health efforts aim to increase attention to this at-risk population. Long-term treatment strategies in persons with mental illness should aim to address psychiatric illness as well as key medical comorbidities.

SAT4.03

Toward the reintegration of psychiatry and medicine in patients with mental illness

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Treatment goals in schizophrenia and bipolar disorder are no longer simply the reduction of psychosis and manic or depressive episodes. Today's treatment goals encompass a broader improvement of quality of life and, as much as possible, the return of patients to premorbid levels of functioning. To achieve these wider-reaching goals, patient care must simultaneously address not only patients' psychiatric illness but also their medical problems. In addition to reducing mortality, there are good psychiatric reasons for addressing the physical well-being of patients: the presence of a comorbid physical illness worsens the prognosis of the mental disorder and vice versa. General medical monitoring should form as much a part of the routine management of patients with long-term mental illness as should psychiatric reviews, and any barriers between diagnosis and treatment in these patients should be examined. The care team needs to be expanded beyond the core psychiatric team, and patient access to primary medical care needs to be improved to ensure parity of medical treatment with the general population. As patient function improves, patients and their families can become more involved in self-management and feel empowered to affect their own outcomes.

SAT5 - Satellite symposium: DOPAMINE TRANSPORTER SPECT IN THE DIFFERENTIAL DIAGNOSIS OF DEMENTIA - A NEW CLINICAL TOOL

Sponsored by GE Healthcare

SAT5.01

Dementia with Lewy bodies: A comparison of clinical diagnosis, DaTSCAN imaging and neuropathological diagnosis

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Background: Dementia with Lewy bodies (DLB) is a common form of dementia. The presence of Alzheimer's disease (AD) pathology modifies the clinical features of DLB, making it harder to distinguish DLB from AD clinically during life. Our aim was to determine, in a series of patients with dementia in whom autopsy confirmation of diagnosis is available, whether functional imaging of the nigrostriatal pathway improves the accuracy of diagnosis compared to diagnosis by means of clinical criteria alone.

Methods: A SPECT scan was carried out with a dopaminergic pre-synaptic ligand [¹²³I]-2beta-carbomethoxy-3beta-(4-iodophenyl)-N-(3-fluoropropyl) nortropane (FP-CIT) on a group of patients with a clinical diagnosis of DLB or other dementia. An abnormal scan was defined as one in which right and left posterior putamen binding, measured semi-quantitatively, was more than 2 standard deviations below the mean of the controls.

Results: Over a ten year period it has been possible to collect twenty patients who have been followed from the time of first assessment and time of scan through to death and subsequent detailed neuropathological autopsy. Eight patients fulfilled neuropathological diagnostic criteria for DLB. Nine patients had AD, mostly with co-existing cerebrovascular disease. Three patients had other diagnoses. The sensitivity of the FP-CIT scan for the diagnosis.

Conclusions: FP-CIT SPET scans substantially enhanced the accuracy of diagnosis of DLB by comparison with clinical criteria alone.

SAT5.02

Results of a multi-centre study of DaTSCAN in dementia with Lewy bodies

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Clinically based diagnostic criteria for DLB have limited accuracy. The availability of a biomarker to assist with diagnosis would be a major advance. Severe nigro-striatal degeneration and dopamine loss occurs in DLB but not in most other dementia subtypes offering a potential system for a biological marker. In the PDT-301 study, 326 patients with dementia with clinical diagnoses of probable or possible DLB, or non-DLB dementia established by a Consensus panel, had a FP-CIT SPECT brain scan labelling the dopamine transporter (DAT) reuptake site in the striatum. Three readers, blinded to clinical diagnosis, classified the images as normal or abnormal by visual inspection. This study which was conducted across 40 European sites, confirms the high correlation between abnormal (low uptake) DAT activity measured using FP-CIT SPECT and a clinical diagnosis of probable DLB. The diagnostic accuracy is sufficiently high for this to be clinically useful in distinguishing DLB from AD.

SAT5.03

The impact of DaTscan can have on dementia patients: Case studies

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Although good epidemiological data do not yet exist, Dementia with Lewy bodies (DLB) is increasingly recognized as one of the most common causes of dementia after Alzheimer's disease (AD). The identification of DLB has important implications in terms of prognosis and patient management. These patients frequently develop motor,