patients improved by an average 40% reduction in rituals after an average of 10.5 weeks in hospital. These gains were maintained at an average 19 month follow-up. Predictors of outcome were looked for but only female success and checking rituals were found to effect outcome.

This study will be discussed in light of more recent work advocating the use of cognitive therapy in obsessive compulsive disorder.

REFINING THE PHARMACOLOGICAL TREATMENT FOR OBSESSIVE COMPULSIVE DISORDER

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Obsessive Compulsive Disorder (OCD) is unusual because it responds selectively to drugs with potent serotonin -reuptake inhibitors (SRI) properties. Clomipramine and the selective serotonin reuptake inhibitors (SSRIs) fluvoxamine, fluoxetine, sertraline and paroxetine, have all been demonstrated to be effective following extensive placebo-controlled investigation. The antiobsessional effects of these compounds emerge slowly and incrementally, and do not depend upon the coexistence of depression. A growing number of fixed-dose treatment studies support the traditional view that higher doses may be more effective for some patients. Long-term treatment studies suggest that the antiobsessional effect of treatment is sustained in the longer-term, but clinical benefits are usually lost once treatment is discontinued. Patients are therefore encouraged to continue with their drug treatment for many years.

There is insufficient study data addressing the comparative efficacy of individual SRIs in OCD. Placebo response rates have risen from < 5% in the early studies to exceed 20% in recent studies, while treatment response rates have fallen, indicating changes in the OCD study population over the course of time. Meta analyses, reviewing large quantities of data pooled from existing studies, are disadvantaged by their inability to control for such changes. For this reason, head-to-head comparator studies are to be preferred, but extremely large numbers are needed in order to avoid missing clinically relevant differences. A preliminary report from the recent, large comparator study demonstrated superior efficacy for sertraline compared with clomipramine, on the intent-to-treat analysis [1].

Given that OCD patients worry a great deal about side effects, and in the absence of convincing comparative data, it would seem sensible to favour the treatments with the better side effect profiles. SSRIs, even at the higher dose levels, appear better tolerated and safer than clomipramine and ought to be considered as first line treatments in OCD.

[1] Bisserbe J.C (1995) Refining treatment approaches in obsessive compulsive disorder abstracts, 1st International Congress on Education and Progress in OCD. Barcelona, Spain 22–25 June. p10.

SLEEP PATTERNS IN OCD

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There is a paucity in research on polysomnography of OCD patients as a biological marker. The present study was designed to evaluate the sleep profile in patients with OCD, with and without sleep complaints. 19 patients fulfilling ICD-10 criteria of OCD in addition to 10 controls matched for age, sex and the patient group have been studied with standardized sleep questionnaired and all-night polysomnography. An attempt was made to identify a possible correlation between the severity of OCD (assessed by means of the YBOCS) and the sleep profile of patients. The results showed a significantly decreased REM latency and increased arousal in the patient group. The difference in other sleep measures was not significant. The finding of decreased REM latency in the abscence of depression may question the diagnostic specificity of REM latency in depression and the possible biological overlap between OCD and major depression.

BODY DYSMORPHIC DISORDER AND THE RELATIONSHIP TO OCD

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Body Dysmorphic Disorder (BDD) is hypothesised as being closely related to OCD. Evidence is based upon a range of different factors including similarity of symptoms; the overlap with the need for symmetry and order; frequent comorbidity; temporal transition from one syndrome to another; specific responses to treatment; sex ratio; and age of onset. We assessed 50 patients with a structured diagnostic interview who satisfied DSMIV criteria for BDD as their primary disorder. We excluded patients who were psychotic and those who were preoccupied by their weight and shape. The average age of onset was 18 years and average duration of symptoms 14 years. The most common additional axis I diagnoses in our study were either a mood disorder (26%), social phobia (16%) or obsessive compulsive disorder (6%). 24% had made a suicide attempt in the past. 72% of patients had one or more personality disorders diagnosed. The most common personality disorders were avoidant (38%), paranoid (38%) and obsessive compulsive (28%). There was extensive checking and avoidance behaviour that was focused on the perceived defect. 19 of the patients were treated in a pilot randomised controlled trial of cognitive behavioural therapy against a waiting list. There was a mean reduction of 50% of symptoms in those who received cognitive behavioural therapy and a slight increase in those who were on the waiting list. We conclude that BDD patients have some similarities to OCD in so far as the nature of their symptoms, the age of onset and duration before presentation. The sex ratio was different in our study even when we excluded patients who were preoccupied with their weight and shape. There was no control group of OCD patients but there appears to be a higher proportion of comorbidity in both axis I diagnoses of a mood disorder or social phobia than in OCD. Patients appeared to respond well to cognitive behaviour therapy but this cannot be regarded as a specific response.

TREATMENT OF RESISTANT OCD

J. Zohar, Y. Sasson, I. Iancu.

Despite the significant progress that has been achieved in the past decade in the treatment of obsessive compulsive disorder (OCD), 20 to 30 percent of OCD patients are still resistant to treatment. OCD patients tend to require higher doses and longer periods of treatment. Therefore, before assuming resistance, a duration of ten weeks of treatment with the highest recommended dose of the relevant medication is in order. While there is no controlled data regarding the beneficial effect of switching from one anti-obsessive medication to another, this is a common practise. During this process it may be especially useful to attempt a high dose (250 mg per day) of clomipramine. To date there is only one subtype of OCD patients who have shown beneficial effects from augmenting strategy. Patients with a combination of OCD and tic-disorder get additional benefit when a small dose of neuroleptics is added to their anti-obsessive treatment. Other augmenting agents that have been attempted with differing degrees of success are: fenfluramine, lithium, trazodone, tryptophan, buspirone and pindolol. The role of monoamine oxidase inhibitors (MAOIs) in treatment-resistant OCD is not yet quite clear. However, in resistant cases, a trial of non-reversible MAOIs may

be considered. Sometimes the family of the OCD patient plays an important role in maintaining the obsessive-compulsive symptoms and unless a broader approach (i.e. family approach) is applied, patients may continue to be resistant. The role of cognitive behavior therapy alone or in combination with each of these approaches is of great importance as well in these severe cases. For very severe resistant patients who do not respond to any treatment, neurosurgery may be beneficial. In the treatment of resistant cases it is important to maintain the patient's hope along with a step-by-step logical approach. This is especially true in a field that is progressing as rapidly as OCD.

S44. The economics of mental health care

Chairman: M Knapp

Abstracts not received

S45. The new generation of antipsychotics: considerations and challenges

Chairmen: T Barnes, A Altamura

MOVEMENT DISORDERS IN SCHIZOPHRENIA AND IMPLICATIONS FOR THE USE OF NEWER ANTIPSYCHOTICS

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Clinical studies of the newer antipsychotic drugs, such as clozapine and risperidone, have consistently shown a lower liability for extrapyramidal symptoms (EPS). However, the interpretation of data from controlled, comparative studies of new and conventional antipsychotics may be confounded by the issue of dosage differences, and perhaps dosage frequency. The potential lack of equivalence between the doses of the two drugs may partly explain any observed differences in side-effects. However, the development of EPS may not be simply a function of dosage. For example, while chronic akathisia may be associated with younger age and higher antipsychotic dosage, the likelihood of developing acute akathisia may be greater if high-potency antipsychotics are administered in rapidly-increasing dosage. Thus, for the newer drugs, the prescribing recommendation for a gradual introduction should mitigate against the development of acute akathisia. Similarly, for tardive dyskinesia, while the outcome may partly depend on dosage, the proportion of time that antipsychotic medication is received may be an important variable, that is, intermittent treatment may be associated with a poorer outcome than continuous treatment.

The evidence that patients developing EPS may be at greater risk of developing tardive dyskinesia, raises the possibility that the newer antipsychotics will be associated with a lower incidence of tardive dyskinesia over time. However, longer-term studies will be required to test whether maintenance treatment with new and conventional drugs at optimum doses reveals any clinically-significant differences in the incidence of this problem. Nevertheless, there are reports that clozapine may reduce the severity of tardive dyskinesia and tardive dystonia in patients that have developed these conditions while receiving conventional drugs.

DOPAMINE AND SEROTONIN RECEPTOR OCCUPANCY IN PATIENTS TREATED WITH ANTIPSYCHOTICS

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Using positron emission tomography (PET) and [11C] raclopride the mechanism of action of antipsychotic drugs was examined in schizophrenic patients treated with classical and atypical antipsychotics respectively. Regarding the *classical* antipsychotics, the dopamine hypothesis was supported by 1) the consistent finding of a high D2 receptor occupancy in patients responding to treatment with classical antipsychotics (70–90%) and 2) the finding of a statistically significant relationship between the degree of D2 receptor occupancy and antipsychotic effect in a controlled double blind study of patients treated with raclopride.

In patients treated with the *atypical* antipsychotic drug clozapine the D2 receptor occupancy was significantly lower (20–67%). It has been suggested that the atypical effects of clozapine are related to a combined effect on D2- and 5-HT2 receptors. In 5 clozapine treated patients (125–400 mg/day) examined with PET and [11C]*N*-methylspiperone ([11C] NMSP) a very high 5-HT2 receptor occupancy (84–94%) was a consistent finding. Although substantial 5-HT2 receptor occupancy has been found also during treatment with thioridazine, the combination with a relatively low D2 receptor occupancy is so far unique for clozapine.

In the new generation of antipsychotic drugs most have affinity *in vitro* both for D2 dopamine and 5-HT2 receptors. Preliminary data from four patients treated with risperidone indicates a D2 receptor occupancy of 75–80% and an even higher 5-HT2 receptor occupancy. In a study of three healthy controls given a single oral dose of 10 mg olanzapine the D2 receptor occupancy was 59–63% after 7 hours and the 5-HT2 receptor occupancy was 74–92% after 9.5 hours. The D2 and 5-HT2 receptor occupancy induced by clinical treatment with olanzapine in low doses may be similar to that of clozapine. Despite these observations the clinical significance of 5-HT2 receptor occupancy needs to be further clarified.

OLANZAPINE VERSUS HALOPERIDOL: RESULTS OF THE MULTI-CENTER INTERNATIONAL TRIAL

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This international, multicenter, double-blind, parallel trial compared the efficacy and safety of a single dose range of olanzapine, 5–20 mg/day, to a single dose range of haloperidol, 5–20 mg/day, in the treatment of 1,996 in- and out-patients with a DSM-III-R diagnosis of schizophrenia (83.1%), schizophreniform disorder (1.9%), or schizoaffective disorder (15.0%). Patients were assigned by random allocation to double-blind therapy in the ratio of 2 olanzapine to 1 haloperidol. The acute phase of the trial was 6 weeks in length which was followed by a double-blind extension. Patients who remained in double-blind treatment at least 3 weeks but were not showing