Eating Disorder Update

At this year's APA annual meeting, a group of leading investigators gathered to discuss the latest data and trends in the field of Eating Disorder research.

Using Positron Emission Tomography, University of Pittsburgh School of Medicine researcher Walter Kaye, MD, evaluated dysregulation of the serotoninergic (5-HT) and dopaminergic (DA) system in individuals recovered from anorexia or bulimia nervosa (Kaye WH et al. *Physio Behav* 2005;86:15-7).

Results of this study showed patients who have recovered from anorexia nervosa to have elevated 5-HT receptor activity, especially in the 5-HT_{1A} and $_{1B}$ types. Furthermore, although recovered anorexic patients had elevated 5-HT transporter activity, 5-HT transporter activity in bulimic patients was reduced. In the context of DA, recovered anorexic patients showed elevated DA_2 receptor activity in the brain's reward system. This data lends strong evidence to the position that dysregulation of the 5-HT and DA systems is intimately involved in the etiology of eating disorders. Dr. Kaye suggests that these two neuro-pathways may be related to "altered anxiety, obssessionality, appetite, impulse dyscontrol and body image distortions".

In his talk, Ulrike Schmidt, MD, of London's Institute of Psychiatry, provided an overview of a Cognitive Interpersonal Maintenance Model for the treatment of anorexia. Based on data indicating that anorexics perform significantly worse on tasks measuring attention to detail and cognitive shifting strategies [eg, the Embedded Figure ($p<0.05$) and Wisconsin Card Sorting Task (Roberts ME et al. *Psychol Med* 2007;30:1-12], four specific targets for intervention should be highlighted. Specifically, clinicians must address: a) obsessive compulsive personality disorder traits, b) avoidance of emotions and social situations, c) pro-anorexia beliefs, as well as d) response of "close others". These issues may be dealt with by providing cognitive remediation and trait feedback.

Following the overview on treatment options for anorexic patients, Ulrike also presented data on a randomized controlled trial for the effectiveness of Family Therapy versus Guided Self Care in patients with Bulimia Nervosa (Schmidt U et al. *Am J Psychiatry* 2007;l164:591-8). In the context of "bingeing", Guided Self Care was more effective than Family Therapy at reducing the number of episodes in this population 6 months into treatment ($p<0.001$). This difference dissipated by the 12-month follow-up

Timothy Walsh, MD, Columbia University, highlighted recent advances in the psychopharmacological management of eating disorders. Although the

pharmacological treatment of bulimia is well established, primarily the use of antidepressants, the effectiveness of medication in the treatment of anorexia nervosa is more uncertain. For example, the data evaluating the effectiveness of the selective serotonin reuptake inhibitor, fluoxetine, in prolonging time to relapse is not encouraging. Ninety three (93), recovered subjects were utilized in this two site (Toronto, Canada and New York, New York) study. Although survival rates within the study differed between the two sites (survival was greater in Canada; p=0.005), fluoxetine, overall, did not prolong time to relapse.

Despite these negative findings, results from a study with the atypical antipsychotic, olanzapine, suggest greater efficacy in treating anorexia nervosa with this drug. In a 13-week trial, 34 day-treatment patients with anorexia nervosa were given olanzapine and monitored for weight gain. It was reported that patients on olanzapine had a faster rate of weight gain as compared to those patients receiving day-treatment only (p=0.04). These results should be interpreted cautiously, notes Dr. Walsh. No medication is clearly effective for anorexia nervosa and that the best treatment remains caloric intake.

In the final address of the session, Annemarie van Elburg, MD, Reintveld Center for Eating Disorders, the Netherlands, compared and contrasted eating disorders in children and adolescents. In children, the most common eating disorders include food avoidance emotional disorder, functional dysphagia, pervasive refusal syndrome and early anorexia nervosa. Adolescents commonly present with the more classical eating disorders of anorexia nervosa, bulimia nervosa, eating disorder not otherwise specified and emetophobia. One central question is whether the age of onset of eating disorders is getting younger. Although, no clear biological underpinning has been identified, the anecdotal correlation between puberty and the onset of a full blown eating disorder suggests a neuroendocrinological trigger and provides an opportunity for future investigations.

Evaluating the Effectiveness of Your Medication Choice:

One significant issue facing patients currently on antidepressants is the loss of effect that may occur with chronic use of the drug, ie, the so called "poop-out" effect. Elaborating on this issue, Mark Zimmerman, MD, Brown University School of Medicine, Providence, RI, states, "When you see someone in your practice, and you put them on medication, and they respond, you are essentially seeing two types of individuals. Some are true drug responders. Some have responded to the non-specific effects of treatment. They are placebo responders." Despite their response to treatment, there are no available clinical indicators to differentiate between these two types of responders.

The fact that some individuals are placebo responders, may account for the majority of cases of relapse reported in medication continuation studies (Zimmerman M, Posternak MA, Ruggero CJ. *J Clin Psychopharmacology* 2007;27:177-81). One experimental design that is useful in parceling out the rate of relapse attributable to placebo responding is the "Extension Design". In this paradigm, active medication or placebo is initially assigned in a double-blind fashion. Responders to active medication or placebo then go on to the continuation phase of the study with no change in their treatment. That is, individuals assigned to the medication group remain on medication, while those given placebo continue to receive placebo. This design allows for the question, what percentage of relapse in patients on active medication can be attributable to an initial placebo response?

In order to calculate the percentage of relapse accounted for by placebo responding, four pieces of data are needed. In the acute phase of the experiment, the Response Rate to Medicine (RRM) and the Response