ATTRIBUTIONAL RETRAINING GROUP THERAPY VERSUS SELECTIVE SEROTONIN REUPTAKE INHIBITORS: NEUROBIOLOGICAL EFFECTS

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Objective: The aim of this study was to compare the effectiveness of attribution retraining group therapy (ARGT) versus selective serotonin reuptake inhibitors (SSRI) in the treatment of major depressive disorder (MDD), generalized anxiety disorder (GAD) and obsessive-compulsive disorder (OCD).
Methods: 109 patients with MDD, GAD and OCD were recruited from the outpatient department of a tertiary referral hospital between 2007 and 2008. Subjects were sequentially recruited and randomized into ARGT group (n=63) and SSRI group (n=66) for an 8-week treatment period. 54 outpatients in ARGT group and 55 outpatients in SSRI group completed the study. All subjects were assessed using Hamilton Depression Scale, Hamilton Anxiety Scale before and after treatment. Yale-Brown Obsessive Compulsive Scale was employed only for OCD subjects. Plasma hormone levels of serotonin, norepinephrine, cortisol, adrenocorticotropic hormone, and brain-derived neurotrophic factor (BDNF) were measured at baseline and at 8 weeks.
Results: Symptom scores were reduced significantly in both ARGT and SSRI treatment groups ($p < 0.001$) at the end of the treatment course. However the patients in the ARGT group had significantly lower plasma cortisol concentrations compared to baseline ($p < 0.05$). On the other hand, patients receiving the SSRIs showed significantly increased plasma levels of serotonin ($p < 0.05$) and BDNF ($p < 0.01$).
Conclusions: Our findings suggest that ARGT may modulate plasma cortisol levels and take effect to the HPA axis as opposed to SSRIs which may up-regulate plasma serotonin and BDNF levels via a different pathway to produce an overall improvement in the clinical condition of patients.