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INABILITY TO CONTROL RECURRING AGGRESSIVE IMPULSES: PSYCHOLOGICAL MANAGEMENT. A CASE REPORT

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Abstract

Background: *Intermittent explosive disorder is recurrent behavioral outburst with failure to control aggressive impulses. A case of intermittent explosive disorder with differential diagnosis of Adjustment disorder and Borderline Personality traits. Mental Status Examination reflected guilt, regret and distress due to inability to control anger followed by aggressive action. Millon Clinical Multiaxial Inventory III (MCMI-III) and Rorschach Ink Blot Test were used for psychological evaluation. Assessments results indicates traits of lower stress tolerance, feels uncomfortable about her ability to deal adequately with negative feelings and often have problems modulating her own affective displays and impulsive.* ***Methodology:*** *A re-educative approach of treatment was planned with short term goals to increase awareness of anger, avoidance and escape, managing physical arousal, relaxation skill development. The long term goals were focused on cognitive restructuring, assertive training, self-instructional and self-regulation training.* ***Treatment Outcome:*** *After psychological management, patient reported more satisfied and better aware of physiological arousal when angry, use distraction technique when required and regulate anger. There was improvement in daily functioning, coping and problem solving and in relationship with her parents and peer. Future plan is focused on providing Neurofeedback training to enhance her self-regulation.* ***Implication and Recommendation:*** *In cases like Intermitted explosive disorder and other conditions of Impulse control disorder, along with psychotherapy or pharmacotherapy, effect of neurofeedback training could be explored.*

Keywords: *Intermittent Explosive Disorder, Impulse Control Disorder, Borderline Personality traits, Neurofeedback training*

INTRODUCTION

Impulsive aggression is related to neuropsychological and cognitive psychophysiological measures of information processing [1]. And intermittent explosive disorder is recurrent behavioral outburst with failure to control aggressive impulses which is grossly out of proportion to the provocation to any psychosocial stressors. The recurrent aggressive outbursts are not explained by mental disorder or medical conditions and are not premeditated or committed for any tangible objective, causing marked distress in the individual or impairment in occupational or interpersonal functioning, or are associated with financial or other consequences. Intermittent explosive disorder can be overlapping with other personality disorder [2]. It is suggested that abnormalities in corticolimbic functioning may contribute to aggression in Intermittent explosive disorder (IED), Borderline personality, Antisocial and Conduct disorder. Coccaro et al. (2007) found that individuals with history of impulsive aggressive behavior have dysfunction in amygdala and orbitofrontal cortex reactivity to social threat. Decreased prefrontal functioning could result in a lack of inhibition and a lack of control of the subcortical structures but at the same time, genetic, neurophysiologic and neuroendocrine variables in conceptualizing Aggressive behavior is crucial [4].

CASE DESCRIPTION

Patient A, 19yr old female presented with complaints of aggression and violent behavior, Unable to control anger and difficulty falling asleep since last 8-9yrs with insidious onset, episodic course and static progression. Her anger outburst would lead to destructive and damaging of properties, over dosed herself with medicines and misuse of alcohol. Patient reported, it has becomes very difficult for her to control on her anger and usually results in hitting others or breaking things. At times, there is regret because before she could process the situation, she impulsively acts out. She does feel distress due to her repeated aggressive behavior and consulted the psychiatrist who further referred to clinical psychologist for personality assessment. There is a history of father being tensed and having similar episode of anger outburst. There is past history of seizures with first episode at age two and continued till age 11 and half (with two to three episodes in a year) and was on

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antiepileptic till 12yrs of age. There is history of Poly Cystic Ovarian Disease (PCOD) and Pre-Menstrual Syndrome (PMS) since age 11yrs and on medication for same till date. Her temperament shows: fluctuating mood and impulsive action when angry. She says when people do wrong things, it becomes very difficult for her to calm down and usually find it unacceptable. On Mental status examination, her thought content reflected guilt, regret and distress due to inability to control anger followed by aggressive action. Millon Clinical Multiaxial Inventory III (MCMI-III) and Rorschach Ink Blot Test was used for psychological evaluation. Findings indicated traits of lower stress tolerance, feels uncomfortable about her ability to deal adequately with negative feelings and often have problems modulating her own affective displays and impulsive behavior. Provisional diagnosis of intermittent explosive disorder and differential diagnosis of Adjustment disorder and Borderline Personality traits was framed.

CASE FORMULATION

History of seizures and long term use of Anti-Epileptic drug and history of PCOD could increase risk for aggressive behavior. Her temperament reflects short tempered and quickly aroused. So this predisposition towards developing traits of anger outburst is precipitated by any provocation event or situation. The characteristics traits of aggression are also similar traits seen to be common with her father which is learned from him as she have been observing since childhood. The problems are maintained as she have never consulted and taken help. She has poor frustration tolerance and coping mechanism causing her to emotionally collapse in stressful situation which was supported by the assessment results. At home when the patient gets angry the parents also gets angry and this maintains the behavior. The problem is modulated due to lack of flexibility to think. There is usually no cognitive flexibility and acceptance of reality and less regard for friends and family whom she gets angry at. Also that anger for her is intrinsically connected to threat perception, inability to appraise cognitively and low stimulus thresholds for the activation of arousal perhaps due to physiological dispositions. Based on the hypothesis, reeducative approach of treatment plan was provided.

TREATMENT PLAN AND GOALS

The psychotherapy provided was based on Anger Management, Relaxation training, interpersonal problem solving skill, cognitive restructuring, self-instructional and self-regulation training and assertive training. The sessions were structured by the use of an agenda which is set collaboratively with the patient. Total numbers of sessions conducted were 10 sessions with once a week therapy session. The short term goals were to Increase awareness of anger, Avoidance and Escape, Managing Physical Arousal, Relaxation Skill development. The long term goals were Cognitive restructuring, Assertive Training, Self Instructional and self-Regulation Training.

COURSE OF TREATMENT AND MONITORING OF TREATMENT PROGRESS

The initial two sessions were focused on history taking, assessments and developing therapeutic alliance. The latter part of the session was focused on training the patient to learn avoidance and escape technique during anger situations as temporary emergency anger control measures. This was a temporary avoidance (stimulus control) technique used in order to lower the overall arousal to common generalized triggers and provide the patient with an opportunity to develop other problem solution strategies. The avoidance techniques that were discussed with the patient were through use of planned avoidance for example if she knew that certain thing or situation will provoke her anger than she will decide or plan in advance that she will be there for only short time and leave before she experience anger. Similarly other techniques like avoidance by time delay and avoidance by seeking an alternative method of responding was also taught to the patient. Escaping method like timeout technique, leaving the field (escape from aversive stimuli) was also encouraged when anger is imminent, or has already developed. She was complimented for use of distraction technique or using self-soothing positive statement during anger situation or provocation.

The **middle session** of the therapy focused on bringing the change. Therefore she was ultimately made to focus on management of anger and provided relaxation training. She was made aware about the automatic anger responses tendencies and mind body relationship. The technique was used to increase awareness through self monitoring anger episode by reflecting on triggers of her anger, associated cognition, behavior, physiological experiences, and reactions of others and anger consequences. The patient was then trained with deep breathing relaxation which was repeated in the consequent sessions and also proposed to practice. The goal was to help the patient learn to reduce ventilation so that it is consonant with metabolic demand for oxygen, thus facilitating relaxation and clear receptive thinking while reducing arousal. As the patient was already practicing meditation along with her swimming training prior to psychotherapy session, she was encouraged to continue such practice. The half of the middle session was focused on exposure to anger episode through intensive role plays, role reversal, Imaginary recall of past anger events and stimulation of common anger engendering interactions by developing common anger-evoking scenarios which are relevant to her life. The role-plays in the session were

basically to teach patient about the possibilities of solution to the given problem, teach appropriate social skills and regulate her anger. Few past anger events were discussed during the session in order to reflect on how she was perceiving, processing her thoughts and how she felt. She was asked to be aware about how she was processing the entire event and what errors and emotions are occurring, to challenge the thoughts through Socratic questioning and see the difference in the outcome. So it was during these sessions that patient could understand and she explains that her preconceived belief and action needs to be more in control. She reported to have become more flexible in her thoughts and accepting the reality. With more training and homework, patient gradually learn to identify these automatic thought and it was observed that repeated pattern of negative automatic thoughts were more persistent like repeatedly and frequently used should and must statements and catastrophic. Gradually, She became more resilient to provocation and less use of should statements and became more aware of anger consequences. She found alternative ways of viewing situations and experiences.

The terminal session and future plan will be to enhance her self-regulation by using neurofeedback training. The patient's biological process will be measured and information about the process is provided to her (information will be provided in contiguous with the biological event). The minimum of 15-20 sessions (thrice a week) is to be planned for patient with the goal not only to facilitate relaxation but help her in better regulation of herself. Formally a baseline EEG recording is taken with the help of co-therapist and subsequently the neurofeedback training will be provided so that she learns to control her own experiences and how she manifests external stimuli.

TREATMENT OUTCOME

After undergoing therapy, the patient reported that she was more satisfied and better able be aware of physiological arousal when angry, use distraction technique when required and regulate anger. There was improvement in daily functioning, coping and problem solving and in relationship with his parents and peer.

DISCUSSION AND LIMITATIONS

A case of intermittent explosive disorder with differential diagnosis of Adjustment disorder and Borderline Personality traits with childhood history of Epilepsy and PCOD. Her temperament reflects traits of short tempered and quickly aroused. Piazzini et al (2012) study have suggested that age and duration could be key factors influencing aggression in Epilepsy and younger age often express more aggression. Psychological Assessments indicating lower stress tolerance, inability to deal adequately with negative feelings, problems modulating her own affective displays and impulsive traits. Total of 10 psychotherapy sessions was provided with short term goals of Increasing awareness of anger, Avoidance and Escape, Managing Physical Arousal, Relaxation Skill development. And long term goals for Cognitive restructuring, Assertive Training, Self Instructional and self-Regulation Training. Post Intervention, patient reported more aware of physiological arousal, became more flexible and assertive. She reported improvement in daily functioning, coping and problem solving and relationships. The terminal session and future plan are focused on enhancing her self-regulation by using EEG based neurofeedback training. Neurofeedback training has its own pro and cons but generally considered as a safe intervention. It is proven effective (Christiansen et al, 2014) and Bluschke (2016) study have shown that specific neuronal mechanism underlying impulsivity are modulated by theta/ beta neurofeedback in externalizing behavior disorder. It does not only reduced impulsivity or improves attention but long term training also helps reduction of emotional and behavior disturbances (Kubik, 2016). Hence, neurofeedback training will enhance her self-regulation. Long term engagement of patient for Neurofeedback post-psychological intervention can be one limitation.

IMPLICATION AND RECOMMENDATION

In cases like intermittent explosive disorder and other conditions of Impulse control disorder, along with psychotherapy or pharmacotherapy, we can explore neurofeedback training. Clinical trials can be suggested to assess the effectiveness of neurofeedback with this population.

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