

Electroconvulsive Therapy for Multiple Major Self-Mutilations in Bipolar Psychotic Depression

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Abstract

Self-mutilation is form of self-injurious behavior which is either low intensity, high frequency form seen in personality disorder and mental retardation or low frequency, highly destructive form which occurs in the context of psychosis or acute intoxications. We report a 32 yr-old male with bipolar affective disorder presenting with multiple acts of major self-mutilation during an episode of psychotic depression. At presentation he had broken upper central incisors, circular burn scar on right palm, crush injury of left index finger with avulsed nail and cut injury over glans penis. In view of his extreme self-mutilating behavior, he was administered electroconvulsive therapy on second day following which self-mutilating behavior improved after fourth ECT. After 8 ECT sessions, he was started on lithium carbonate with a serum level of 0.82 meq/L and haloperidol 15 mg/day and there was no recurrence of self-mutilating behavior during follow up after four months.

Key Words: Self-mutilation; Bipolar Depression; ECT

INTRODUCTION

Self-mutilation is form of self-injurious behavior reported with a variety of psychiatric conditions, like affective disorders, personality disorders (mainly borderline), substance abuse, anxiety disorders, and medical conditions such as Lesch-Nyhan Syndrome (Haw 2001). Pathological self-mutilation has been defined by Favazza and Rosenthal (1993) as “the deliberate alteration or destruction of body tissue without conscious suicidal intent”, distinguishing self-injury incurred during a cultural ritual or socially accepted body modification such as tattooing and body piercing. Favazza and Simeon (1995) had classified self-mutilation into two categories on the basis of severity and frequency: 1) moderate or superficial type: low intensity, high frequency form seen in personality disorders and mental retardation; and 2) severe or major type: low frequency, highly destructive form which occurs in the context of psychosis or acute intoxications. The low intensity high frequency forms were further subclassified into compulsive, impulsive and stereotypic types.

The major form of self mutilation is usually sporadic and non-repetitive, involving highly destructive forms which are not suicidal. Among these patients the exotic examples of self-mutilation such as amputation of body part, self-enucleation, stabbing, auto-castration, and even auto-cannibalism and auto-surgery have been reported (Conn and Lion 1983). This form of self injury is seen in psychotic conditions like schizophrenia, intoxicated states and severe depression (Favazza 1989, Favazza and Rosenthal 1993). Self-injurious behavior among psychotic patients often occurs in response to command hallucinations or delusions, which are frequently religious in nature (Conn and Lion 1983). Common themes include punishment for guilt and sexual transgression (Conn and Lion 1983).

Various psychopharmacological agents including antipsychotics, lithium, beta blockers, buspirone, naltrexone, L-tryptophan have been found to be useful in reducing self-injurious behavior (Luchins 1990). Clozapine has been found to reduce self-mutilating behavior in a case of borderline personality disorder (Ferrerri et al. 2004). There are occasional reports in which electro-

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Figure I. Missing upper central incisors.

convulsive therapy has reduced psychotic self-injurious behavior (Bates and Smeltzer 1982; Dean 2000).

We report a patient with bipolar affective disorder presenting with multiple acts of major self-mutilation during an episode of psychotic depression, who responded to a course of electro-convulsive therapy (ECT).

Case report

Mr A, 32 yr-old Muslim male, presented with an acute onset illness characterized by increased psychomotor activity, elated mood, grandiose ideas for initial 4 months, followed by decreased interaction, depressed mood, crying spells and self injurious behavior for past 2 months. He had four manic episodes in the past with full inter-episodic recovery without any treatment. There was history of paranoid schizophrenia in his maternal grandfather and paternal uncle. Neither the patient nor the family members had any history of self-mutilating behavior. There was no history suggestive of any personality disorder in the patient. His family members including his father and brother had witnessed him crushing his finger on a stone with a brick on one occasion, and at another time trying to cut his penis with a sickle. The other acts of self mutilation included banging his face on a pole breaking his teeth and burning of palm. Physical examination revealed multiple healed scars on both arms and legs, missing upper central incisors with granulation tissue on the gums (fig I), circular burn scar on right palm (fig II), crush injury of left index finger with avulsed nail (fig III), and cut injury over glans penis. On mental status, he was depressed, had decreased psychomotor activity, ideas of hopelessness and worthlessness, delusion of guilt, religious and bizarre delusions. He believed that he would be closer to God by injuring himself and that he

deserved punishment for watching pornographic movie in the past. He had ingested a shaving blade which he tried to remove by cutting his penis in the belief that it will flush out during micturition.

He was diagnosed as bipolar affective disorder, current episode severe depression with psychotic symptoms and injection haloperidol 10 mg intramuscular twice daily was started. In view of his extreme acts of self-mutilation, bilateral ECT thrice weekly was started along with medications on second day of admission. After fourth ECT, there was improvement in his affect, psychomotor activity and no further acts of self-mutilation were noted. His delusions resolved completely after sixth ECT and he could recognize his previous self-mutilating behavior as senseless acts. Two further ECT sessions were administered over the next week. After the course of ECT, lithium carbonate was started as mood stabilizer and a serum level of 0.82 meq/L was achieved, along with tablet haloperidol 15 mg/day. He was maintaining well at follow up after four months without recurrence of self-mutilating behavior.

DISCUSSION

Major self-mutilation has been described occasionally with unipolar depression (Haw et al. 2002), but we could not find any reports associated with bipolar depression. The multiple acts of self-mutilation that were noted only in the current episode of psychotic depression were conspicuously absent in his previous episodes which happened to be manic. Several risk factors for major self-mutilation in psychotic individuals have been reported



Figure II. Circular burn scar over right palm.



Figure III. Crush injury over left index finger with partially avulsed nail.

such as a history of previous self-mutilation, a sudden or dramatic change in body appearance, delusions and hallucinations, often with religious or sexual content, and preoccupation with religion and sexuality (Shore et al. 1978, Favazza 1989, Sweeny and Zamecnik 1981). In this patient bizarre and religious delusions along with delusion of guilt were the reason behind the self-mutilation acts. This pattern is usually reported in association with schizophrenia, whereas in depression, only delusions of guilt are common cause (Haw 2001). The religious rationale of coming closer to God through acts of self-mutilation as he had made sexual transgressions by watching pornographic material is similar to previous reports (Stinnett and Hollender 1970). Another unusual feature in our patient was the multiple ways of major self-injury like cutting, burning, banging, and crushing which rarely occur together. Unlike the particular pattern of self-injury seen with other disorders such as self-cutting in borderline personality, head banging and biting

in mental retardation associated with organic disorders which has some diagnostic and prognostic implications (Pattison and Kahan 1983), self-mutilation associated with psychosis is non-repetitive. Penile self-mutilation, seen in this patient is a rare form of self injury seen almost entirely in psychotic states. The eponym, Klingsor syndrome is used for patients with penile self-mutilation occurring secondary to religious delusions (Schweitzer 1990).

In our patient ECT was helpful for severe self-mutilating behavior secondary to psychotic symptoms. Bates and Smeltzer (1982) had reported successful use of ECT for psychotic self-injurious behavior in mentally retarded person. Although the use of ECT for self-injurious behavior has not been systematically studied, its use can be justified when they occur in association with psychosis. Nevertheless, maintenance ECT has been found to be useful in a patient with schizophrenia having repeated self-mutilation (Dean 2000). Similar to our case, the patient had several acts of major self-mutilation such as injuries over head, avulsed nail and injury over hand. After multiple courses of antipsychotics and mood stabilizers, he was given a year-long trial of clozapine without success. He was administered 10 bilateral ECTs, but the self-mutilation reappeared after 1 month, requiring a second course of ECT. He was thereafter given maintenance ECT every 2 weeks, which was gradually lengthened with significant reduction of self-mutilating behavior. In contrast, our case responded after fourth ECT without any relapse of self-mutilating behavior even after four months.

To conclude major forms of self-mutilation may occasionally be seen in bipolar depression in association with psychotic symptoms. Religious themes and guilt associated with sexual transgressions associated with psychosis should entail a thorough search for other predictors of self-injurious behavior and calls for a vigilant attitude for occurrence of major forms of self-mutilation. In such high-risk situations ECT could be considered early as a treatment option along with antipsychotic medications.

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