

# Self-Enucleation in a Young Schizophrenic Patient – A Case Report

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## ABSTRACT

**Self-enucleation represents an extreme but fortunately rare form of deliberate self-harm. Case reports of patients who self-enucleate reveal some common features. A case of auto-enucleation in a young schizophrenic patient and a short discussion on deliberate self-harm are presented.**

**Keywords: self-enucleation, deliberate self-harm, schizophrenia**

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## INTRODUCTION

KSP is a 21-year-old Chinese lady, who had been diagnosed to have schizophrenia since the age of 18, three years ago. She has been admitted for relapses for a total of four times.

In her last admission to the psychiatric ward, during which she self-enucleated, her complaint was of an increase in disturbing auditory hallucinations. The content of these were derogatory and included commands to injure herself. She was grossly preoccupied and failed to hear staff calling her as she wandered up and down the corridor. Her progress in the ward was tumultuous, unlike her previous admissions during which her symptoms would resolve within a week or two. This time, despite increases, combinations and changes of antipsychotic medication and a course of electroconvulsive therapy, she improved only transiently, with several relapses during the hospital stay.

On the night of the self-enucleation, she was particularly distressed by the hallucinations. She required physical as well as chemical restraints, but despite these, managed to render the self-injury to her left eye.

Examination of the eye under anaesthesia and with computerised tomography revealed that the optic nerve was truncated. Several of the extra-ocular muscles were torn and there was generalised trauma to the globe. Vision was irreparably lost.

When later questioned, the patient said that her act of self-harm was a response to her command

hallucinations. “God” had instructed her to gouge her eye out. Rather disarmingly, the patient’s mental state improved after the incident. She was discharged on clozapine therapy.

## SHORT DISCUSSION

Deliberate Self-Harm (DSH) runs in a spectrum from the mild (e.g. skin picking and hair-pulling) to the more serious forms like self-cutting, with extreme versions like genital mutilation, self-amputation and auto-enucleation. These extreme versions are fortunately rare and published literature is mostly in the form of case reports. Not all self-injurious actions reflect suicidal intents. Some result from delusions, particularly those with religious content or command hallucinations. Ananth et al, suggest that self-enucleation of the eye actually serves as a protection from suicide<sup>(1)</sup>. Crowder found some common features in his review of patients who had self-enucleated. They tended to have a source of guilt, which was displaced to the eye; and an attempt at self-inflicted eye injury was followed by relief from anxiety when completed, or by frustration when injury was prevented<sup>(2)</sup>. Nonetheless, all patients who present with DSH should have their mental state and suicide risks carefully assessed.

Common psychiatric associations with DSH include the psychotic and mood disorders, dementia, borderline personality disorder, substance abuse and mental retardation. Patients with some syndromic conditions like the Cornelia DeLange, Prader-Willi and Lesch-Nyhan Syndromes are particularly prone to DSH.

Several personality traits feature prominently in the psychopathology of DSH. In patients presenting for the first time with DSH, scores on impulsivity scales are higher than expected when compared with normative data after correcting for age and sex<sup>(3)</sup>. Another study on adolescents, however, cautioned that detecting depression is imperative. When repeat self-harmers were compared with first-time self-harmers, the former had higher scores for depression,

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hopelessness and trait anger, and lower scores for self-esteem and problem-solving<sup>(4)</sup>. These differences largely disappeared when level of depression was controlled for. Therefore, in the management of adolescents who have harmed themselves, careful assessment for and management of any depression are essential.

Biochemically, lowered serotonin levels have been demonstrated in patients who self-harm. Contrasting patients who impulsively self-harm with those who have planned their self-injurious act, a significant reduction of serotonergic activity, proved by a blunted prolactin response to D-fenfluramine, was found in both groups compared to normal controls. Prolactin response after D-fenfluramine challenge was most blunted in the impulsive group<sup>(5)</sup>. Nonetheless, the role of serotonin deficiency in DSH has yet to be fully elucidated, and the use of serotonin raising drugs is still not proven fully effective in the prevention of further DSH.

Psychodynamically, childhood physical and sexual abuse have been found to closely linked with DSH in adulthood. The clear statistical association is most marked in those subjected to more intrusive and more frequent abuse<sup>(6)</sup>. With psychiatry moving into a more pro-active stance, it is pertinent to recognise at risk individuals and make known to them the supportive services available.

Treatment of patients with DSH should follow biopsychosocial lines. Drugs like the selective serotonin reuptake inhibitors, antipsychotics and even naltrexone<sup>(7)</sup> have been shown to reduce the recurrence of DSH. Dialectical behaviour therapy, a form of cognitive-behaviour therapy, has been shown to reduce repeat episodes. Use of manual-based treatment in the form of self-help booklets also has yielded promising results<sup>(8)</sup>.

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