

Case Report

Attempted auto-enucleation in two incarcerated young men with psychosis



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Abstract

Auto-enucleation is a sign of untreated psychosis. We describe two patients who presented with attempted auto-enucleation while being incarcerated. This is an observation two-case series of two young men who suffered untreated psychosis while being incarcerated. These young men showed severe self-inflicted ocular trauma during episodes of untreated psychosis. Injuries included orbital bone fracture and dehiscence of the lateral rectus in one patient and severe retinal hemorrhage and partial optic nerve avulsion in the second patient. Auto-enucleation is a severe symptom of untreated psychosis. This urgent finding can occur in a jail setting in which psychiatric care may be minimal.

Keywords: Trauma, Psychosis, Schizophrenia, Enucleation, Self-mutilation

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Introduction

The removal of one's own eye is alternately termed self-enucleation, auto-enucleation, or Oedipism, the latter term being derived from Freud's Oedipus complex. This type of self-mutilation is rare but is often the result of undertreated or untreated psychosis.^{1,2} Unfortunately, many undertreated individuals with psychosis reside in penitentiaries.³ We report two cases of attempted auto-enucleation in patients who were concurrently incarcerated.

Case presentations

Case 1

A 22-year-old schizophrenic patient committed a violent burglary and was incarcerated awaiting arraignment. The patient had previously stopped antipsychotic medications

for several days. On the fourth day of his incarceration, the patient was brought to the emergency room for bloody discharge from his right eye. He reported that he had attempted to "tear his eye out," because it was "evil." A complete ophthalmic examination including visual acuity, and intraocular pressure could not be performed, because the patient was psychotic and combative. The eye had severe lid ecchymosis and conjunctival hemorrhagic chemosis. The globe appeared intact. The anterior segment was normal, but dilated fundus examination could not be performed due to the patient's inability to cooperate. A complete abduction deficit of the right eye was observed. The lateral rectus muscle was hanging from its insertion to the globe. It had been detached from its origin at the annulus of Zinn. Computed tomography (CT) scan of the orbits demonstrated a fractured right orbital floor and an intact right globe. Presumably, the patient had reached under his right globe with his finger, outfractured his orbital floor to gain access to the annulus and severed the connection of the lateral rectus. The patient was lost to follow up after the

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cut lateral rectus stump was surgically repositioned in the orbit, and the eye was patched.

Case 2

The second patient was a 32-year-old African American schizophrenic male incarcerated for a homicide committed five days prior. He had discontinued antipsychotic medications several weeks before the alleged crime. He was found by penitentiary officials with bloody fingers and a right eye "that was bulging out" and was brought to the emergency room. On exam, the patient was intermittently catatonic. His left eye was unharmed, but his right eye was severely proptotic with a dense relative afferent pupillary defect. The lateral rectus had been transected. Subjective visual acuity testing could not be performed due to the patient's intermittent catatonia. The intraocular pressures in both eyes were normal. The anterior segment was undisturbed, but the fundus examination revealed superotemporal retinal whitening, and subhyaloid and subretinal hemorrhage – findings consistent with a partially-avulsed optic nerve. CT scan demonstrated an intact right globe with a stretched optic nerve. The orbital bones were intact. The patient had presumably manually stretched and partially avulsed his optic nerve and caused proptosis in an attempted auto-enucleation. Gentle manual reduction of proptosis was performed. Psychiatric medication was recommended, but the patient refused. He was returned to jail and lost to follow up.

Discussion

Based on literature search, this is the first report of attempted auto-enucleation among incarcerated young males. However, psychiatric disease among incarcerated adolescents is common. Compared to non-incarcerated adolescents, incarcerated adolescents are more likely to have several psychiatric diagnoses.³ Compared to non-self-mutilators, self-mutilators among incarcerated young males are more likely to exhibit elevated scores on general measures of psychiatric symptoms, particularly depression and hostility.⁴

Self-mutilation in settings of incarceration is not rare. During a one-year period at a single institution for the criminally insane, 29 incidents of self-mutilation occurred, mostly involving cutting of the extremities. The behavior also tends to be contagious among the incarcerated mentally ill. Apparently, the behavior of self-mutilation was learned among these individuals by watching the behaviors of those who had previously performed the act.⁵

Though originally considered to be the result of psychosexual conflicts, including those arising from Freud's Oedipal complex and Christian religious teaching, it is now established that self-enucleation is a result of psychotic illnesses such as schizophrenia. Consequently, anti-psychotic medication can be extremely effective in preventing self-mutilation.² Though schizophrenia is the classic disorder causing psychosis, self-mutilation has been observed in acute transient psychotic disorder,⁶ psychotic depression with paranoid delusions,⁷ psychosis associated with aqueductal stenosis,⁸ and drug-related psychosis secondary to both PCP and amphetamine abuse.^{9,10}



Figure 1. Axial CT scan through the orbit of a 32-year-old patient demonstrates a stretched right optic nerve with preseptal and orbital emphysema. The left orbit and globe were uninjured.

Consequences of auto-enucleation or attempted auto-enucleation can be vision and life-threatening. Attempted self-enucleation has been associated with loss of vision in the fellow eye due to injury to the optic chiasm, as well as subarachnoid hemorrhage, cerebrospinal fluid leaks and a loss of pituitary function. Patients have also removed or damaged their remaining eye while in hospital receiving treatment for self-enucleation.¹

We posit that ocular self-mutilation is an urgent condition that requires prompt treatment by an ophthalmologist and a psychiatrist. Since these patients may present initially to an emergency room, it is important for health care providers in the emergency room setting to be aware that at the core of the problem may be untreated or inadequately-managed schizophrenia, which may be more likely in patients who are incarcerated (see Fig. 1).

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Conflict of interest

The authors declared that there is no conflict of interest.

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