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A case report: The beautiful mind

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***Abstract*---**Caring for a family member diagnosed with schizophrenia will not only impart a lifetime emotional distress but also social and financial challenge. Failure to anticipate and cope with the burden of care responsibilities will add an unnecessary risk to permanent injury resulting in a substandard management of the patient and even death. We describe a case of successful removal of nine (9) constricting rings from the finger of both hands in a poorly taken care of an abusive relapse schizophrenia patient using an oscillating saw and ring cutter under prosedural sedation combined with wrist block in emergency department (ED). Early recognition and a definitive treatment are of paramount importance in order to avoid irreversible ischemia and gangrene. The possible risk of negligence should be kept in mind bearing a link with depression among members caring for schizophrenia.

***Keywords*---**lifetime emotional distress, beautiful mind, schizophrenia.

Introduction

Schizophrenia is a disabling and debilitating chronic psychiatric disorder that poses a constant challenge to both to primary healthcare providers (PCP) and family members. By improving family environment it helps to reduce relapse and easing the burden of care (Glynn S.M., 2012). Certain personality traits increase the risk of burden and depression in caregivers looking after family members with a mental illness (Lautenschlager *et al.*, 2013 ; Kim *et al.*, 2017).

PCP is occasionally responsible for immediate removal of the constricted rings from patients' fingers. When choosing a method one must take into account about not only about the material to be removed, severity of the fingers involved and availability of tools but also the age, the pre-morbid illness and the cooperation from the patient.

Case Report

A middle age male with underlying treatment resistant schizophrenia, with history of recurrent admission and frequent defaulters came to psychiatric clinic for follow up and was found to sustained a constricted rings with swollen fingers at both hands associated with pus discharged since last month. He claimed the rings is giving him a superpower and agressively refused for removal. Further history revealed that, he was admitted to Orthopaedic ward about six months ago due to disarticulation of right little finger associated with gangrene secondary to constricted ring but he absconded from ward and claimed self amputated followed by daily dressing at health clinic.

Initial assessment showed an uncooperative, poorly kept medium built gentleman with no features of sepsis. Mental state examination (MSE) showed an active psychotic features with no aggresive behaviour. Examination of the right hands revealed five rings stuck at fingers in which one at thumb,one at index and three at middle finger respectively. There was also foul smelly pus discharge from the middle fingers and the fingers are grossly swollen. Whereas at the left hand; there was one ring at the ring and little finger respectively and two rings stuck at the middle fingers (Exhibit 1). A radiograph of both hands reveal a soft tissue swelling, however no subcutaneous air seen (Exhibit 2). Other systemic examinations were unremarkeble. Baseline investigation were normal and blood culture was negative after day five.

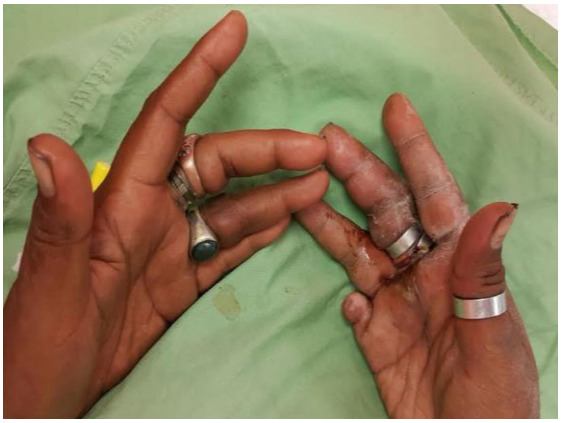
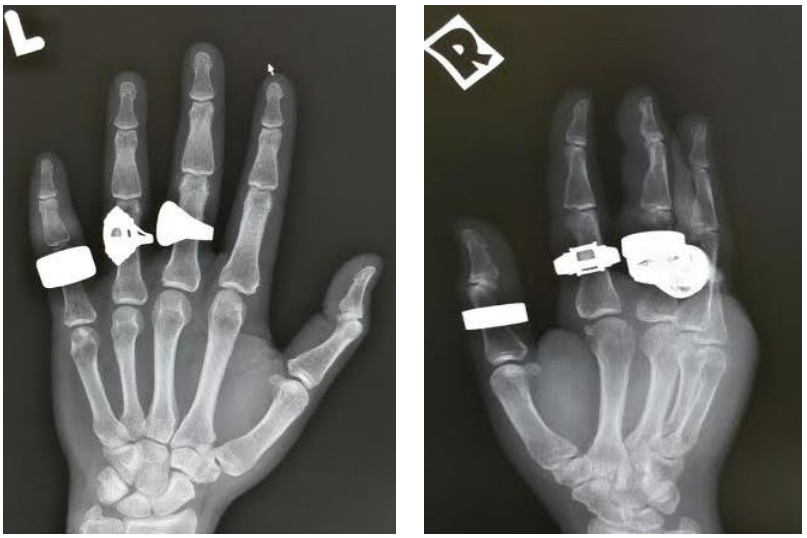


Exhibit 1: Patient's hand with stuck rings



Exhibits 2 : A radiograph of patient's hand

Attempted removal of the ring using oscillating ring cutter had failed and patient became aggresive. A procedural sedation (PSA) using titrated dose of midazolam and fentanyl combined with wrist block were then used. All the nine ring was successfully removed (Exhibit 3). He was later admitted to orthopedic ward for proper wound debridement and management. The patient was discharged well on the fifth day of admission after psychotic symptoms are controlled. The family members were adviced and counselled regarding the need for family support in the management of the patient.

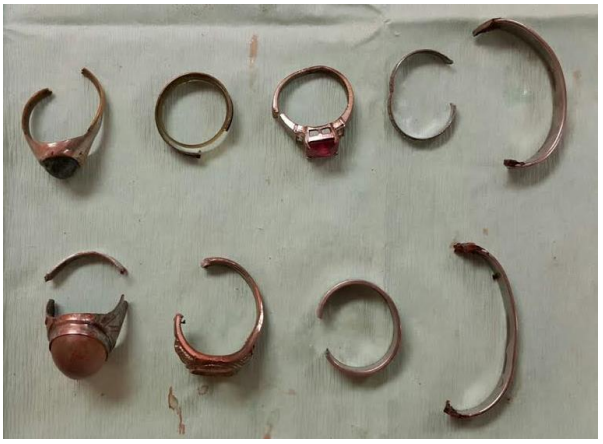


Exhibit 3: The removed rings

Discussion

There is no such a case of neglected schizoprenia patient presented with constricted rings involving both hands in the literature search at present. Patients with severe psychiatric illnesses have a greater risk of deliberate self-harm (DSH), hence is a major cause of morbidity and mortality as compared to the general population (Osborn *et al.*, 2008; Singhal *et al.*, 2014). The family members involved in the co-management of the schizoprenia often feel distress, overwhelmed and corrosive to family interactions thus may lead to negligence of the patient.

It was suggested that individuals with schizophrenia are exquisitely sensitive to environmental stress (Nuechterlein and Dawson, 1984; Van Os *et al.*, 2010). Individuals with the disorder whose relatives express high levels of critical comments and/or high levels of self-sacrificing behavior have a significantly greater likelihood of relapse within the subsequent 9 months (Butzlaff *et al.*, 1998; Ma *et al.*, 2021). As the family environment significantly influences prognosis in schizophrenia therefor it served as the impetus for interventions needed to support the patient's recovery and prevent the similar risk of injury in the future.

PSA using titrated dose of midazolam and fentanyl combined with wrist block were used in this case. Midazolam either alone or in combination with an opioid analgesic (e.g. fentanyl, morphine), is a common combination for its beneficial effects such as amnesia, anticonvulsant, anxiolytics, and sedation (Miner *et al.*, 2013). The fentanyl was chosen because of its prompt and short duration with good analgesia, sedative and minimal cardiovascular depressive effect. Furthermore, both are easily reversed by an antidote. A wrist block will ensure a multimodal pain management and improve patient satisfaction. PCP should obtained consent in writing because ring-removal procedures can result in accusations and claims by patients against practitioners (Whitcher J., 2008).

The supportive family is vital to prevent future recurrence. PCP should provide an assessment to explore their own needs and discuss the strengths and views about

the care responsibilities. A feedback mechanism is mandatory for communication and review collaboration difficulties between the caretaker and PCP. A focused education with constant-instill positive message about recovery or support program should be started early which may be part of a family intervention for psychosis and schizophrenia (Taylor and Perera, 2015).

Conclusion

Patients with psychiatric illnesses have a greater risk of DSH. As the family environment significantly influences prognosis in schizophrenia therefor it served as the impetus for early interventions needed to support the patient's recovery and prevent the similar risk of injury in the future. In line with a better communication and understanding of family members, the risk of negligence is minimised hence the recovery and recurrent incident will be improved.

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