

Obsessive–Compulsive Disorder, Major Depressive Disorder, and Gender Dysphoria Complicated by Non-Medical Self-Castration and Subsequent Genital Self-Injury: A Case Report from Sudan

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Case Report

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Abstract

Introduction: Self-inflicted genital injury is rare and typically reflects severe underlying psychiatric morbidity, including psychosis, obsessive-compulsive disorder (OCD), gender dysphoria, and major depressive disorder (MDD). Reports from Arab and sub-Saharan contexts remain scarce, despite evidence that stigma and limited access to integrated psychiatric and gender-affirming care increase the risk of irreversible, non-medical intervention. We describe a case illustrating this intersection in a previously undiagnosed young man.

Case Presentation: A 22-year-old Sudanese university student presented with chronic insomnia and depressive symptoms superimposed on a five-year history of untreated, contamination-related obsessive-compulsive disorder. He later disclosed longstanding, concealed gender dysphoria and guilt-laden obsessions centred on eliminating sexual desire. Nine months before presentation, he had undergone bilateral orchiectomy performed by an unlicensed practitioner. Sertraline was initiated and titrated to 100 mg daily, alongside a structured suicide-risk assessment and safety plan. Depressive symptoms and compulsive rituals improved over six months, though he continued unsupervised use of informally obtained feminising hormones. Approximately four years after the orchiectomy, he inflicted penile amputation at home, resulting in severe haemorrhage and emergency hospitalisation.

Conclusions: This case, among the first reported from Sudan, highlights the risks of fragmented, delayed psychiatric care in patients with concealed gender dysphoria and obsessive-compulsive symptoms, and underscores the need for early, culturally sensitive, multidisciplinary evaluation to prevent irreversible harm.

Introduction

Genital self-mutilation is an uncommon but severe manifestation of psychiatric distress. Reported associations include psychotic disorders, severe mood disorders, obsessive–compulsive phenomena, substance use, and gender dysphoria (1–4). In low-resource or high-stigma settings, patients may delay disclosure of identity-related distress, seek non-medical interventions, or resort to self-harm (5, 6). This case illustrates the intersection of OCD, depression, and gender dysphoria in a sociocultural context where access to multidisciplinary care was limited.

Case Presentation

Demographic Data

X.A., a 22-year-old single male university student residing in Khartoum, presented voluntarily to a psychiatric unit. He was described as intellectually gifted and previously high-achieving academically.

Chief Complaint

“I am not able to sleep for more than two months; doctor, please give me sleeping tablets.”

History of Present Illness

The patient reported a five-year history of sleep disturbance that had worsened over the preceding two months, characterized by difficulty initiating sleep, early morning awakening, and non-restorative sleep. Chronic insomnia is frequently comorbid with mood and anxiety disorders.

During extended interviews, he disclosed a longstanding history of intrusive thoughts and compulsive washing rituals beginning at age 13, consistent with contamination-related OCD. He described transient relief after rituals and exacerbations during stress. At age 18, symptoms intensified; he received supportive psychotherapy without psychiatric evaluation or pharmacotherapy, despite evidence that combined cognitive-behavioral therapy and selective serotonin reuptake inhibitors are first-line treatments for OCD.

He subsequently developed intrusive sexual guilt and self-punitive ideation centered on castration as a means of eliminating sexual desire. Despite years of therapy, these obsessions persisted. A urological consultation noted borderline low testosterone and elevated prolactin; endocrine abnormalities may exacerbate mood and sexual distress but do not justify irreversible surgical interventions in themselves.

Approximately nine months prior to presentation, he underwent bilateral orchiectomy by an unlicensed practitioner. He reported transient relief of guilt but persistent obsessive rituals and worsening depressive symptoms. He described anhedonia, fatigue, impaired concentration, social withdrawal, academic decline, and recurrent suicidal ideation without active plan features consistent with major depressive disorder.

The patient was initiated on sertraline 50 mg daily, which was titrated gradually to 100 mg/day over subsequent weeks. A structured suicide-risk assessment was conducted, and an individualized safety plan was implemented in collaboration with the patient. In parallel, endocrinology consultation was advised for hormonal surveillance and bone-density assessment. Treatment with sertraline was associated with a marked reduction in depressive symptoms, improved sleep continuity, and partial alleviation of obsessive ruminations, consistent with established evidence supporting selective serotonin reuptake inhibitors as first-line therapy for both major depressive disorder and obsessive-compulsive disorder.

He denied hallucinations, delusions, or manic symptoms. Over time, he disclosed concealed gender dysphoria due to cultural stigma. He intermittently obtained feminizing hormones online without supervision, a practice associated with medical and psychiatric risk.

At 6-month follow-up, the patient remained on sertraline 100 mg/day with sustained improvement in mood, reduced compulsive rituals, and continued engagement in psychotherapy. He was largely free of depressive symptoms; however, he reported intermittent, unsupervised use of feminizing hormones obtained informally through acquaintances outside Sudan, without medical supervision or monitoring.

Approximately four years later, he inflicted penile amputation at home under local anesthesia, resulting in severe hemorrhage and emergency hospitalization. Severe genital self-injury has been documented in association with gender dysphoria, obsessive–compulsive disorder, and mood disorders, particularly in contexts of fragmented or delayed access to comprehensive care.

Family and Developmental History

He was raised in a nuclear family of middle socioeconomic status. His father had a history of alcohol misuse; his mother had chronic renal failure requiring dialysis. A sibling had chronic psychiatric illness suggestive of a schizophrenia-spectrum disorder. Family loading for psychotic and mood disorders is a known vulnerability factor for severe psychopathology.

Developmental milestones were unremarkable. He excelled academically and had a previously sociable and optimistic premorbid personality.

Physical Examination

General examination was unremarkable. Genital examination revealed an empty scrotum with bilateral surgical scars consistent with prior orchiectomy. No other systemic abnormalities were noted.

Mental Status Examination

The patient appeared cooperative and polite with reduced eye contact. Speech was slow but coherent. Mood was subjectively depressed; affect was dysphoric yet reactive. Thought processes were linear. Thought content showed excessive health preoccupation but no delusions or perceptual disturbances. He denied current suicidal or homicidal intent. Cognition and orientation were intact. Insight and judgment were partial but improving. These findings were consistent with depressive and obsessive–compulsive psychopathology without overt psychosis.

Formulation

A young adult with early-onset OCD developed severe guilt-laden obsessions, untreated gender dysphoria, and progressive major depression. In the context of sociocultural stigma, fragmented care, and limited access to integrated psychiatric and gender-affirming services, he pursued irreversible non-medical genital surgeries. There was no clear evidence of psychosis or substance misuse. Family psychiatric loading and chronic interpersonal stressors were significant vulnerabilities.

Provisional Diagnoses

Obsessive–Compulsive Disorder.

Major Depressive Disorder, recurrent, moderate–severe.

Gender Dysphoria.

Discussion

This case underscores the complex interplay between OCD, depression, and gender dysphoria. Literature indicates that severe self-inflicted penile amputation is most frequently associated with psychosis but may also occur in non-psychotic conditions such as OCD and gender dysphoria when distress is extreme and care is inaccessible (Aboseif et al., 1993; Bauer et al., 2014; Greilsheimer, 1979). Evidence-based management requires early multidisciplinary assessment involving psychiatry, psychology, endocrinology, and, when appropriate, structured gender-affirming services guided by established standards of care (Coleman et al., 2022). Fragmented or delayed intervention increases the risk of irreversible harm, unsafe hormone use, and engagement with unlicensed practitioners (Bauer et al., 2014; Dhejne et al., 2016).

Management of gender-related distress and severe self-harm in low-resource or highly conservative sociocultural settings may be significantly constrained by stigma, limited public awareness, and the absence of formal clinical protocols (Patel et al., 2018; World Health Organization, 2021). In countries such as Sudan, gender diversity and related mental-health concerns are often socially marginalized, which can delay disclosure, reduce help-seeking behavior, and expose individuals to discrimination or threats of violence (Arcelus et al., 2015; Logie et al., 2012). The lack of structured multidisciplinary pathways integrating psychiatry, psychology, endocrinology, and social support further compounds risk, as patients may resort to unsupervised medical interventions or self-injury (Patel et al., 2018; World Health Organization, 2021). These cultural and systemic barriers underscore the need for confidential, culturally sensitive care models, clinician training, and clear ethical guidelines to protect patient safety while respecting local social contexts.

As to our knowledge, among the first such reports from Sudan.

Conclusion

Severe self-injury may arise from overlapping psychiatric conditions when timely, integrated, and culturally competent care is unavailable. Clinicians should screen for concealed gender dysphoria and intrusive guilt-based obsessions in young adults presenting with chronic insomnia and depression. Multidisciplinary management and early evidence-based treatment are essential to prevent catastrophic outcomes (American Psychiatric Association, 2022; Bauer et al., 2014; Coleman et al., 2022).

Declarations

Ethical Considerations. This report describes findings from a single patient encountered during clinical care and was prepared in accordance with the principles of the Declaration of Helsinki.

Consent to Participate. Not formally applicable, as this report is based on the patient's existing clinical record. Written informed consent for publication was obtained from the patient (see Consent for Publication, below).

Consent for Publication. Written informed consent for publication of this case report, including clinical details, was obtained from the patient. All potentially identifying information has been anonymized to protect confidentiality.

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Author Contributions.

Abdelaziz A. Osman: Conceptualisation, writing (original draft), writing (review and editing).

Taisir Hagar: Writing (review and editing).

Muhanad Elnoor: Conceptualisation, writing (review and editing).

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