

Characteristics and Management of Male Genital Self-Mutilation: A Series of 08 Cases

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Abstract:- Male genital self-mutilation is a physical self-injury to the external genital, most often without suicidal intent, which occurs in the majority of cases in a psychotic setting but can be secondary to other disorders such as erectile dysfunction and in transsexual patients. Through a retrospective study of eight cases of self-mutilation managed between January 2010 and December 2020, we reviewed the characteristics, psychopathological mechanisms responsible for this condition as well as the urological and psychiatric management modalities. In this study we reported a series of male cases aged between 30 and 55 years, the type of lesion was variable: 7 cases of total or partial amputation of the penis and only one case of self-mutilation of the testicles. In total, 90% of the cases studied had a psychiatric background, requiring multidisciplinary management, especially by psychiatrists. The surgical management was a urethrostomy in 7 out of 8 cases. The evolution of the patients who benefited from a re-implantation of the penis was marked in most of the cases by the necrosis of the re-implanted penis.

Keywords:- Penis, Testicles, Self-Mutilation, Penis Reimplantation, Psychiatric Disorders, Urological Emergencies.

I. INTRODUCTION

Self-mutilation of the external genital is an injury inflicted on the external genital, most often without suicidal intent [1]. The first scientific description was made by STROCH in 1901, with few cases being published in the literature. Self-mutilation occurs in the majority of cases on a psychotic terrain but it can be secondary to other disorders such as erectile dysfunction and in transsexual patients[2,3]. Single, isolated clinical cases have often been reported in the literature and very few multiple case series exist and do not always allow valid conclusions to be drawn about male genital mutilation[4].

Through the retrospective study of eight cases between January 2010 and December 2020, we review the characteristics, the psychopathological mechanisms responsible for this condition as well as the urological and psychiatric management modalities.

II. MATERIALS AND METHODS

This is a single-center retrospective study of male external genital self-mutilation managed at the Urology Department of Hassan II University Hospital in Fez, Morocco. This study pooled data from self-mutilated patients over the 11-year period from January 2010 to December 2020. Data collection was done on patient records obtained from the medical records registry available in the department. The aim was to inform all the patients who were received in the service for genital self-mutilation and who benefited from a complete management within the urology division of the University Hospital and whose clinical data contained in the files were exploitable. The main information concerned: age, type of lesion, hemodynamic and functional repercussions, urological and psychiatric management, the place of the re-implantation of the penis, as well as the post-operative evolution on the general, urological and psychiatric status. The different surgical procedures were conducted by the urology team of the University Hospital and the postoperative follow-up after healing of the surgical wounds was conducted by the psychiatry team of the University Hospital. The objective of our study was to analyze the main characteristics of self-mutilated patients in terms of psychiatric history, management and results obtained after surgery.

III. RESULTS

From 1 January 2010 to 31 December 2020, of all 08 cases: there were 7 patients who had self-mutilation of the penis and only one patient who had self-castration. The average age of the patients with self-mutilation was 38 years with extremes of age ranging from 19 to 55 years, the age ranges are distributed as follows: 6 patients were under 40 years, 2 patients over 50 years. Five patients (67%) were married and 03 patients were unmarried (37%). The most frequent antecedents were schizophrenia and smoking found in 88%, 75% of the patients respectively, the antecedents found are listed in **table 1**.

A careful history was taken on admission of the patients, which revealed the mechanism of occurrence of self-injury of the external genital in each patient. The mechanism was represented in the majority of cases by the use of a sharp material while trying to cut the penis in 06 patients (75%), by the use of a metal ring in only one patient(12.5%), and by self-castration with his nails in only

one patient (12.5%), **table 2**. The time of consultation of the patients was variable between the first 12 hours in 06 patients (75%), and between 12 and 24 hours after the incident in only one patient (12.5%), and the second day in only one patient (12.5%), **table 3**.

The diagnosis of self-mutilation of the external genital was retained in view of the clinical context, and the anamnestic results of the family, with an instability of the hemodynamic state in 04 patients (50%). Psychiatrically: euphoria and emotional indifference in 05 patients (62.5%) and psychic agitation in 02 patients (25%). The clinical examination on admission revealed a penis amputated at its root in 03 patients (37.5%), a penis amputated at its median part in 02 patients (25%), a penis severed at its root in 02 patients (25%), auto-castration in one patient (12.5%), followed by sharp pain in 07 patients (88.5%).

Active bleeding was observed in 05 patients (62%), bladder urine retention in only one patient (12.5%), Urethrorrhagia was observed in 02 patients (25%), swollen penis with phlyctenes and cyanosis in only one patient (12.5%), total amputation of the penis at its root taking away a large area of the scrotum leaving the testicles partly bare was found in only one patient (12.5%), externalized testicles with a visible wound on the top of his right hemi scrotum measuring 4 cm with an ecchymosis extending from his scrotum to the inguinal region, with a scrotal hematoma was found in only one patient (12.5%), no patient had a localized hematoma at the level of the penis nor a large bursa.

The site of self-mutilation was medio-penile in 02 patients (25%), at the root of the penis in 05 patients (62.5%), and at the level of the scrotum in only one patient (12.5%). It was a section in 03 patients (37.5%), a total amputation of the penis in 02 patients (25%), and a partial amputation in 02 patients (25%).

For the majority of our patients, we considered it unnecessary to use any additional examination to confirm the diagnosis of self-mutilation of the penis, we based ourselves purely on the context of occurrence and on the clinic, except for one patient who was admitted for auto-castration where a CT scan with intravenous contrast was performed to localize the spermatic cord.

A biological assessment based on a blood count was indicated in all patients to assess the degree of bleeding. All the patients in our series were treated surgically after stabilization of the hemodynamic state, then they were referred to the psychiatric department for further therapeutic management, the objective of which was to better understand the meaning of their behavior and to find other solutions than acting out.

Our 08 patients received medical treatment according to the context of each patient. Two patients were put under medical treatment with benzodiazepines because of their psychological state before the surgical procedure. All 08 patients were put on anti-inflammatory and analgesic drugs for one week. Antibiotic therapy based on protected

amoxicillin in the postoperative period was almost systematic.

All patients were operated on under spinal anesthesia. The approach for the 08 patients was the elective procedure. It was found that 05 patients had a first stage urethrostomy around a bladder catheter as no attempt at reimplantation was made, whereas two patients had a second stage urethrostomy after failure of reimplantation. Our study had objectified two re-implantation attempts. The first patient who was admitted to the emergency room for a penis partially severed at its root in a frank way with perfect hemostasis, the distal segment put in a bowl of ice cubes, or he benefited from a re-implantation of the penis without vascular anastomosis with a urethral time first, but he was recuperated five days later for necrosis of the re-implanted segment or a urethrostomy was performed. The second patient was admitted for amputation at the root of the penis with hemorrhagic shock, the patient was admitted to the operating room where he benefited from a re-implantation of his penis, without microsurgical anastomosis of the dorsal vessels of the penis, the urethral time was done first by a suture with resorbable thread on a silicon Foley catheter 18 CH and then a suture of the albuginea in the second time.

None of our patients had an attempt at penile reconstruction. One of our patients was admitted to the emergency room for a unilateral scrotal ulceration, with externalization of both testicles, with hemodynamic shock, the patient was admitted to the operating room: a hemostasis was easily obtained after ligation of both spermatic cords, the dartos and the skin were then closed in two layers with a good postoperative result.

The average procedure time was 45 minutes with extremes ranging from 35 minutes to 180 minutes. The early postoperative course was simple in all patients.

The hospital stay varies between 02 days and 10 days, on average 3 days.

The evolution was favorable in our patients except for two patients who benefited from penile reimplantation where the evolution was marked by necrosis of the implanted segment.

All 08 patients were referred immediately after the operation to the psychiatric department to treat the psychiatric problem that triggered the act of self-mutilation, where they received multidisciplinary psychiatric care including pharmacological treatment based on antidepressants, antipsychotics or thymoregulators, or psychotherapy with the aim of better understanding the meaning of their self-mutilation behavior and finding other ways out than acting out.

IV. DISCUSSION

The first case of self-injury was published in 1901, and other cases have been reported in the literature in psychiatric and urological journals [5]. It is estimated that there are less than 130 cases of self-harm reported in the literature for both sexes [6]. Over a period of 11 years, we identified 7 patients in our center who had self-mutilation of the penis and only one patient who had self-castration. Self-injury is still a rare and underreported phenomenon, with recent data estimating that the rate of self-injury in the general population ranges from 1-4% in the US population to 4.6-6.6% in the UK [7]. In Africa, few data are provided on the prevalence of male self-harm and are reported in small series or single patient case reports. African series reported for Senegal and Morocco respectively 03 cases of penis amputation, 14 cases of genital self-mutilation (penis and testicles) [4,8]. In our series, the small cohort is related to the retrospective nature of the study and the fact that minor mutilations are managed in peripheral centers and not in large referral centers. Self-injury is not pathognomonic of a particular condition, but it is frequently related to psychological morbidity. In our cohort, self-injury was encountered in the average age of 38 years, so the majority of patients were married. In 88% of cases, our patients suffered from schizophrenia and 75% of them were smokers. In the series of Y. Mawuko-Gadosseh's series [4], the average age of their patients was 31.5 years, with a predominance of single patients; also none of their patients were using psychoactive substances at the time of self-harm, however half of their patients had a psychiatric history and schizophrenia was at the top of the list. Psychiatric illness has very often been associated with male genital self-harm throughout the literature. In the study by Veeder Thomas. A review of the literature on the mental disorders that cause self-injury in men[9], 49% of the patients were schizophrenic, 18.5% were substance abusers and 15.3% were patients with personality disorders. The main psychotic causes that have been identified in the literature at the origin of self-mutilation of the male external genitalia are multiple[6]. These psychogenic factors include a history of psychotic episodes, major personality disorders, a history of self-injury, alcohol dependence, sexual dysfunction leading to emotional conflict, early loss of a father, major deprivation in childhood, sexual identity disorders, a sense of femininity, homosexual desires, rejection of masculine traits, strong feminine identification, cross-dressing, and an inability to establish a stable heterosexual relationship[10]. Many theories also consider self-mutilation as a strategy to reduce distress or tension, expression of anger or shame, or manipulative behavior, some authors associate this behavior with borderline personality disorder [11] or treat it as a way for the patient to control traumatic childhood experiences [12]. Our 8th patient, however, had no history of childhood trauma or Axis II disorder. High cannabis use just prior to his act led us to believe that cannabis abuse was the trigger for testicular self-injury. Self-injury can also be related to impulse control difficulties, as here.

In our series, various mechanisms have been reported in male self-injury. In the majority of cases, self-mutilation was performed by using a sharp instrument while trying to cut the penis (75% of cases), by using a large metal ring in one patient (12.5%), and by self-castration with his fingernails in one patient (12.5%). We report here the first case of a patient who mutilated his testicles with his long nails under the influence of cannabis. Throughout the literature[13], the cases reported on the mechanisms of mutilation are grouped around the use of bladed weapons (knives, sickles, sharp objects). Strangulation of the penis with metal rings or elastic bands worn at the base of the penis has also been reported [4,14]. Numerous cases of the use of rings to strangle the penis have been described in order to prolong the erection. These may be rings sold specifically to be placed around the genitals, commonly known as cock rings, or a variety of objects: rings, nuts, pipe wrenches, bottle necks, sheep vertebrae, hair, O-rings, pipes[15]. The use of a prayer ring is not accidental in our 3rd patient who put a big ring at the root of the penis to enlarge his penis.

Clinically, self-mutilation presents itself in very variable aspects going from the simple scratching of the external genitalia to the most spectacular pictures of autocastration or penis amputation. In our series of 08 cases, the diagnosis was made on the basis of the clinical context and the family's anamnestic results, with an unstable hemodynamic state in 04 patients. Psychiatrically, euphoria and emotional indifference were found in 05 patients and psychic agitation in 02 patients. The clinical examination in the emergency room revealed a penis amputated at its root in 03 patients, a penis amputated at its median part in 02 patients, a penis severed at its root in 02 patients, an autocastration in one patient, followed by a sharp pain in 07 patients.

Other clinical signs have been reported in the literature. In the case of self-mutilation of the penis, which is the most frequently described, diffuse post-traumatic oedema and necrotic areas on the penis have been found, giving the appearance of gangrene of the genitals[16]. Some diagnoses are accidental discoveries and others are serious clinical situations complicated by haemorrhage, abscesses or septic states, which can be life threatening[17]. Lesions of the genital area are often associated with numerous early or long-term complications[18]. A proper diagnosis requires a thorough clinical examination and careful questioning. Paraclinical and imaging examinations are often useful in providing additional information.

Self-injury occurs in a particular terrain that requires close collaboration with the psychiatrist. This collaboration will lead to treatment of the psychiatric disorder in conjunction with repair of the urogenital injury[19]. The main aim of the management of male genital self-mutilation is essentially to treat the complications of the trauma, to perform reconstructive surgery such as reimplantations or skin grafts[20]. It is also a question of removing the foreign body or bodies, treating all the complications due to these mutilations and preventing the

appearance of other complications, especially infectious ones[21]. This management requires special skills on the part of the surgeon and a high level of professionalism on the part of the care team to treat the patient without any harmful judgement, and with complete impartiality. The privacy of the patient must be preserved throughout the management of the procedure[18]. Emergency treatment must be provided to the patient as well as long-term treatment. Following the acute phase of care, a psychiatric evaluation is mandatory in order to reveal the reasons that led to such behaviors and to prevent relapse[22]. In our series, the management of our patients was a cutaneous urethrostomy in 06 patients with reimplantation in two others with a necrosis of the penis reimplanted after 05 days. A psychiatric opinion was requested in all our patients. An integrated psychiatric intervention of the liaison type can be effective in improving compliance with psychiatric treatment, surgical results and reducing medical consumption [23]. Monitoring is twofold, clinical (staining, warmth, sensitivity) and radiological (penile Doppler ultrasound) [24]. The evolution was favorable in 05 patients. In two patients there was necrosis of the penis and therefore a subsequent cutaneous ureterostomy, and 3 patients were lost to follow-up.

V. CONCLUSION

Male genital self-mutilation is a very serious situation, with very important psychiatric implications and sometimes very disabling urological and sexual repercussions. Its management requires close collaboration between emergency physicians, urologists and psychiatrists from the moment of admission. Saving the patient's vital prognosis and assessing and stabilizing his psychological state are the first steps in management. If psychiatric stabilization is obtained in the majority of cases, the urological and sexual prognosis is long term and depends on the severity of the lesions and the precocity and efficiency of the initial surgical treatment.

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Table 1: The history of patients with self-mutilation of external genital

History	Number of patients	Percentage
Schizophrenia	7	88.5
Tobacco	6	7
Cannabis	4	5
alcohol	6	7
Erectile Dysfunction	2	2
HTA	1	12.5
Diabetes	1	12.5
Pulmonary tuberculosis	1	12.5
Sterility of couples	1	12.5
Transsexual patients	0	0

Table 2: Mechanism of self-harm in EMBs

Mechanism	Number	Percentage
Use of cutting equipment	6	75
Use of a ring	1	12.5
Self-castration by the nails	1	12.5



Figure : Use of a ring for self-mutilation (Urology Department C. H. U. HASSAN II Fez)

Table 3: Distribution of patients by time to consultation after the incident

Consultation time	Number	Percentage
0-12 hours	6	75
12-24 hours	1	12.5
2nd day	1	12.5



Figure : Mid-penile amputation



Figure : Penis amputated at its root

(Fig. : urology department C. H. U HASSAN II FES)



Figure : Urethrostomy around a Foley catheter (urology department C. H. U. HASSAN II FES)



Figure : Re-implantation in the patient who has severed at the root (served of Urology C. H. U. HASSAN II FES)