

## Caso clinico

# Cannabis use and genital self-mutilation: an update of case reports

## *Consumo di cannabis e auto-mutilazione genitale: un aggiornamento di casi clinici*

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**SUMMARY.** We reported and compared two case reports of genital self-mutilation with concurrent increasing psychotic symptoms resulting from substance abuse such as cannabis and alcohol.

**KEY WORDS:** cannabis, genital self-mutilation, psychotic symptoms, substance abuse.

**RIASSUNTO.** Vengono riportati e confrontati due casi clinici di automutilazione genitale. La mutilazione è avvenuta durante la comparsa di sintomi psicotici con abuso di cannabis e alcol.

**PAROLE CHIAVE:** cannabis, sintomi psicotici, automutilazione genitale, abuso di sostanze.

### INTRODUCTION

Cannabis is one of the most widely used drug of abuse. Many authors claim that the correlation between substance abuse and the onset or exacerbation of psychotic symptoms is very high<sup>1-3</sup>. There is no evidence of increased use of cannabis with the occurrence of psychotic experiences as you would expect from self healing phenomenon<sup>4</sup>. It is known instead the close temporal relationship between THC abuse and psychotic onset<sup>1,5</sup>. Cannabis and alcohol abuse are not only responsible in triggering psychotic symptoms but their use in vulnerable individuals may precipitate these events<sup>1,6-8</sup>.

Genital self-mutilation (GSM) is also an event present in the early stages of acute psychosis, more evident in schizophrenia but also in other psychiatric disorders such as affective psychosis, exogenous psychosis, dementia and borderline personality disorder<sup>4,6,9</sup>. The reasons underlying this event are supported by feelings of guilt and self-punishment<sup>10</sup>. The action also happens in consequence to delusional intuition of mystical-religious content<sup>11</sup> or to experiences of bodily transformation and is intended as an attempt to rapid and violent relief from feelings of depersonalization and denial of their sexual identity<sup>10</sup>.

#### CASE REPORT I

In 2008, the first case<sup>11</sup> of a 26-year-old man with no psychiatric disorders and lacking schooling was described. G.S. worked as a builder's labourer for different companies, before entering the family firm as his brother's partner. The man began to use

cannabis in adolescence. In the period leading up to his admission to hospital he had displayed adaptation and relational difficulties at work, which had prompted his family to encourage him to take time off work at his girlfriend's home. Here G.S. had increased consumption of cannabis. After a period of increasing consumption he started to manifest symptoms like hyperactivity, insomnia, restlessness, up to the clear manifestation of a psychotic episode with mystical-persecutory traits. The intention to punish himself through an expiatory sacrifice was fomented by auditory and mystical perceptions. GSM occurred under the cannabis effect.

#### CASE REPORT II

F.R. is 36-year-old man in care of psychiatric services since the last 10 years. His parents have been separated, and he has a younger sister. He used living together with his mother. He terminated the high school but then he failed to pursue the studies at the University and to find an employment. A prodromal phase of the duration of some years characterised by the onset of the basic symptoms<sup>12</sup> and persecutory traits can be tracked. Moreover, his history included substances abuse (opiates and LSD in the past, cannabis in the last years), alcohol and HCV positivity.

At the first psychiatric visit the psychopathological picture of the patient was characterised by serious paranoid and grandeur/religious delusions. There were also acoustic hallucinations and alterations of the behaviour with suspiciousness towards the relatives, the police and the medical staff. In addition there was also hetero aggressiveness and self-harm. The mood was characterised by mixed symptoms and anxiety symptoms. In the course of the years the social anxiety and deficit of social cognition induced F.R. to live isolated, aside from the relationships (negative symptoms), in a situation with a poor insight and lack of

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improvement regarding hallucinations and delusions (positive symptoms). Sometimes the patient in the attempt to be like a woman depilates himself (eyebrow and body hair removing).

The course of the schizophrenia was chronic with recurrent psychotic episodes. After the first admission to a psychiatric hospital, many other admissions followed, both in situation of compulsory treatment and voluntary admission to the Psychiatric Department of Hospital in Varese. The drug test for cannabis use was always positive.

In March 2013 F.R. performed penile amputation using a razor. The mother refers there was a huge quantity of blood on the clothes and on the bed sheets he used to stop hemorrhage. When he was transferred to the emergency room, the amputation of the penis and of the testicles was complete. The patient refers he acted voluntarily. In the first aid the results of urine drug test was positive for cannabinoids (386 ng/ml – cut-off 50 ng/ml) and alcohol test of the blood was 1,3 g/l.

During the visit at the emergency room the urologists identified cavernous parts and the urethra, they inserted the catheter without any difficulty and operated the patient with stomia and surgical seam. After the medication he was moved in the urologist unit.

Some days later the patient acted in strange ways: he cut off the catheter so that it was necessary the extraction of the rest of it from the bladder. The patient was transferred to the psychiatric department, because F.R. was nervous, clamorous and delirious. In addition F.R. was lacking of a sense of urgency and insight regarding his clinical situation, and manifested inappropriate affect and bizarre behaviour.

After the long lasting admission, the patient was transferred in a therapeutic community. By the time he explained the episode with the necessity to change the sexual identity in order not to have sexual meetings.

Some months later the patient started again to use cannabis and alcohol, so that another admission to hospital was necessary and a new therapy was recommended (switch from haloperidol 6 mg/die, clotiapine 250 mg/die, delorazepam 8 mg/die to clozapine 300 mg/die, delorazepam 6 mg/die, clotiapine 100 mg/die).

**COMPARISONS**

Table 1 shows the two cases (G.S. and F.R.) with similarities and differences.

**DISCUSSION**

Self-mutilation (that can be genital mutilation and eye enucleation) is an episode associated with psychosis and drug abuse<sup>10</sup>. It is well known the linkage between dopamine and self-castration: high dosage consumption of dopamine-agonist substances (such as cocaine and cannabis) can generate self-injurious behaviours like self-mutilation<sup>9,11,13,14</sup>.

Regarding GSM about 110 cases in men have been described in the literature and the majority of these patients were either psychotic or intoxicated during auto-mutilation<sup>15</sup>. However the assumption that genital self-injuries are more often seen in non-psychotic conditions than in productive psychotic states is substantiated<sup>15,16</sup>.

This linkage between abuse of cannabis and GSM is confirmed also in our case report II, with reference to an episode

Table 1. Similarities and differences between case I and case II

	Case report I G.S. <sup>11</sup>	Case report II F.R.
Substance abuse onset	Adolescence	Early adulthood
Substances	Cannabis	LSD, cannabis, alcohol
Psychiatric history	Absent	Psychotic onset 4 years before substance abuse
Diagnosis	Schizophrenic symptoms caused by cannabinoid abuse and genital self-mutilation	Paranoid schizophrenia and genital self-mutilation in cannabinoid abuse
Explanation provided	Mystical-religious delusions	Sexual identity refusal and physical transformation

of self-castration in a patient with schizophrenic disorder. While the case I showed “schizophrenic symptoms” in a period of increased cannabis consumption, F.R. had a mental chronic disorder, with severe social dysfunction.

**CONCLUSIONS**

In Table 1 we reported the similarities and differences of the two cases: absence of mental illness in the first and paranoid schizophrenia in the second, positive evolution in the first and chronic evolution in the second. In addition to cannabis consumption that caused psychotic symptoms, they had in common the religious delusion, generated by mixed mood (elation and guilt) and at the same time the analgesic state caused by cannabis and drug abuse.

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