Absinthe and suicidality

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Abstract

Absinthe is an alcoholic drink which is becoming more widely consumed after being banned for many decades. An association between absinthe use and psychiatric symptoms, ranging from impairment of concentration to marked hallucinations and seizures, has been suggested, but evidence remains unclear. Thujone, identified as a possible psychoactive ingredient, has recently been implicated in absinthe's putative neuropsychiatric effects. This report presents a case where acute suicidality emerged during absinthe consumption; possible neurobiological aetiological mechanisms and the history of absinthe use and associated adverse effects are reviewed.

Key words: Absinthe; Suicide; Alcohol case report.

Case

Mr JG, a 19 year old single employed male, was brought to a psychiatric hospital by his family for an emergency review. Mr JG stated that on the previous evening (12 hours prior to review) he had consumed in the company of friends a half-bottle of absinthe (approximately 350ml) bought from a local off-licence. He reported feeling intoxicated, and within two to three hours of consuming it, experienced strong suicidal thoughts. He denied feeling any disturbance of mood or emotions prior to consuming the absinthe.

He entered the bathroom where he attempted to hang himself using a sweater tied around his neck and fixed to a high window lever. He was interrupted by a friend and was brought for an emergency assessment to the psychiatric hospital on the day by his family. He described his behaviour as an impulsive act with no planning involved. He regretted his actions and stated that he had been feeling stable and quite well beforehand. There was no significant prior personal or family psychiatric history, nor any medical history of note.

Mr JG's substance use history was consistent with episodic alcohol abuse (specifically with a binge-type drinking pattern), but not with alcohol dependence. There was no history of any illicit drug use. He had never previously consumed absinthe. He resided with his mother and enjoyed a good relationship with her. On mental state examination almost 12 hours after the consumption of absinthe, he was found to be alert, euthymic, and free of any disorder of thought content or pattern.

Blood results (full blood count and urea and electrolytes) were within normal limits. The clinical impression was of a resolved episode of acute dysphoria and suicidal ideation and behaviour in the context of intoxication with absinthe. Mr JG reported having consumed alcohol to excess on a number of occasions in the past, but had never developed any concerning psychological symptoms nor experienced any behavioural problems during these times. Of note he was followed up in the outpatient clinic four weeks after the above incident, and was stable. He has consumed alcohol since this incident on a number of occasions without any similar problems emerging.

Discussion

Absinthe is a green-coloured alcoholic liqueur, flavoured in part from fermented wormwood *(Artemisia absinthium)* and a range of herbs such as star anise and fennel. Absinthe's production and consumption became widespread in continental Europe in the late 19th century, when a subculture arose around its use. It was particularly favoured by poets and painters, who formed the so-called Bohemian movement (Vincent van Gogh and Arthur Rimbaud have been reported as frequent users).

The consumption involved a particular ritual – absinthe was taken by pouring cold water over a sugar cube (held in a perforated spoon) into a glass measure of absinthe; the addition of the water turned the liqueur white. The perceived effects of absinthe included alterations in mood and perception.[1] However, a range of concerns emerged regarding the effects of absinthe, and a distinct profile of symptoms (including hallucinations, insomnia, convulsions, and a dependent pattern of use) was described, and given the title 'absinthism'. The validity of absinthism as a discrete clinical condition has been questioned, and the constituent symptoms of the absinthe syndrome are now regarded as being predominantly related to its alcohol content.[2]

In response to a number of factors, including emerging social concern regarding the adverse effects of absinthe abuse, its production and consumption became outlawed in most European countries in the first decade of the 20th century. However, it's manufacture and use has recently enjoyed a partial revival and it is now widely available in Europe, including Ireland.

In addition to ethanol, other potentially psychoactive components of absinthe have been described. Within the last decade, the terpenoid compound α-thujone has been identified as being present in measurable amounts in absinthe. There has been considerable speculation regarding thujone's

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potential role in the neuropsychiatric effects of absinthe. α-thujone's pharmacodynamic profile is that of an antagonist at gamma amino butyric acid (GABA) receptors.[3]

The psychological effects of such compounds (GABA receptors blockers) include symptoms described in association with absinthe use, such as dysphoria, seizures and anxiety. Consistent with the latter actions are the findings of a recent study demonstrating that higher concentrations of thujone consumed with alcohol are associated with a reversal of alcohol's intrinsic anxiogenic effects.[4]

To further explore this issue, recent toxicological studies have attempted to measure the levels of thujone in both commercially available and vintage absinthe.[5] The findings of low (average 1.5mg/l) levels of absinthe in both samples have lead to assertions that thujone may play no, or at best a minor, role in the effects of absinthe[6] and that the previously held effects of absinthe in effect represent an 'urban legend'.[7]

Summary

This clinical case reflects some of the issues in the debate over whether the consumption of absinthe is associated with any particular risks over and above those associated with the consumption of alcohol.

Our patient developed marked acute suicidal feelings in the context of intoxication. While compounds (such as thujone) found in absinthe may have putative mood altering effects, nevertheless the role of alcohol in the development of suicidality is prominent.

Alcohol's potential for precipitating suicidal behaviour is well established,[8] and acute alcohol use may be an important factor in suicides among individuals with no psychiatric history.[9] Use of illicit substances may also lead to emergence of suicidal behaviour and it is important to exclude this possibility by doing a urinary drug screen in addition to full blood count, urea, electrolytes, and liver function tests.

However, the emergence in this case of acute suicidality exclusively in the context of absinthe consumption, but not in previous or subsequent episodes of alcohol misuse, is intriguing.

Healthcare providers, and those who drink absinthe, should remain alert to the putative psychological risks of absinthe consumption which are intriguing and concerning.

To end with a cautionary note, the words of Oscar Wilde regarding absinthe merit reflection: *"After the first drink, you see things as you wish they were. After the second you see them as they are not. Finally, you see things as they really are, which is the most horrible thing in the world."*

Declaration of interest: Dr Daly has served on advisory and/or speaker boards of, and received honoraria from, the following companies: Eli Lilly & Co, Pfizer, Janssen-Cilag, Bristol-Myers Squibb, Wyeth and Lundbeck.

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Case report

Tardive dyskinesia on low dose risperidone

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Abstract

Tardive dyskinesia is a neurological disorder characterised by involuntary and purposeless movements affecting any part of the body. These movements typically occur in the oro-facial area and the patient is usually unaware of them. There are inconsistent findings in the literature on the risk factors for developing tardive dyskinesia. Nevertheless, previous reports indicate that tardive dyskinesia is more common in female patients, patients with a history of alcohol and substance misuse, affective disorders, and intellectual disability. The dose, class and duration of antipsychotic medication may also be independent risk factors. We report on the case of a patient who developed tardive dyskinesia on a low dose of the second generation antipsychotic risperidone.

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