



# Morbid jealousy associated with amphetamine abuse

**The association between morbid jealousy and alcohol consumption is well known; however, there is less awareness of its association with the use of psychostimulants. Here, the authors describe a case of morbid jealousy associated with amphetamine abuse in a 36-year-old man.**

**M**orbid jealousy, often termed delusional jealousy or ‘Othello Syndrome’, is a psychiatric condition in which a lover believes, against all reason, that their beloved is being sexually unfaithful. Patients will be preoccupied with their partner’s perceived lack of sexual fidelity and will often behave in an unacceptable or extreme way as they endeavour to prove their ideas. This can range from stalking behaviour to searching the partner’s clothes<sup>1</sup> or, as with our case, to conducting lie-detector tests. Higher levels of violence are reported, especially violence towards the suspected partner, and also towards third parties mistakenly identified to be the love rival.

Many studies have shown an association between high alcohol consumption and developing morbid jealousy.<sup>2</sup> Some authors have commented upon the use of psychostimulants and the development of morbid jealousy<sup>2,3</sup> and various cases appear in the literature. However, awareness of this latter association is low. Here, we describe a case of morbid jealousy associated with amphetamine abuse.

### Presentation

A 36-year-old man was referred to psychiatric services complaining of low mood, disturbed sleep and that he had been unable to go to work for the last two months since his

partner of 14 years and the mother of his two-year-old son had left him. He believed his partner had been unfaithful to him and has been trying for 14 months to prove this belief despite her repeated denial. His attempts included: following her, searching her mobile phone, returning home unexpectedly and requesting that she takes lie-detection test. He then believed the negative results of the lie detector test must have been falsified. The couple had received joint counselling with little benefit. The patient’s repeated suspicions and accusations resulted in the breakdown of the relationship. His partner moved out with her son to rented accommodation but remained in touch with him.

The patient did not drink alcohol. On specific inquiry, he admitted that he has been taking amphetamines on and off for the past five years and had regularly smoked cannabis for much longer. A urine analysis proved positive for amphetamines and cannabis. Despite repeated attempts to address his substance abuse, there were no known periods of abstinence.

Shortly after his referral to psychiatric services, the patient was arrested following criminal damage to a neighbour’s car. He had attacked the car believing it to belong to his partner’s lover because earlier in the day he

thought that he had seen her gazing out of the window to the area where it was later parked. He had returned to her flat and listened through the letterbox and claimed that he could hear a man’s voice. He attempted to confront the man but on finding the flat empty he believed the lover to have escaped through a window because he heard ‘a thump on the ground’. He shouted at the man to come back, but no one did. At this point he vandalised the car.

A few months later, he believed that his partner had bought a flat where she could meet her lover. He instructed his solicitor to investigate the lease but the legal evidence was to the contrary. The patient believed his partner had somehow covered her tracks. After few more weeks, the patient was arrested again after he left his ex-partner repeated phone messages threatening to kill her then kill himself. This was despite another lie detector test, the results of which were again in favour of his partner.

Throughout, the patient’s contact with psychiatric services had been poor. At times, he has presented in an agitated state; however, there has been no abnormality of speech and no detectable formal thought disorder. Risk assessment continues to be a key aspect of the case and an ongoing challenge for the team.

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## Discussion

Morbid jealousy is well known to be associated with alcohol abuse. However, this case highlights two other important points in relation to morbid jealousy. First, is the association between this disorder and amphetamine use. Second, the seriousness of the risk associated with morbid jealousy.

Cases of morbid jealousy associated with amphetamine use have been presented in the literature. However, they are often in the context of discussing another aetiological factor,<sup>4</sup> or the amphetamine use is recognised but not elaborated upon.<sup>5</sup> In the UK, it has been shown that 1.6 per cent of 16- to 59-year-olds have used amphetamines in the last year,<sup>6</sup> the highest percentage being in 16- to 24-year-olds (4 per cent). This compares with 73 per cent of men and 58 per cent of women who drink alcohol on a weekly basis.<sup>7</sup> The fact that there is more evidence linking alcohol to morbid jealousy may be purely a reflection of the wider use of alcohol. There is little comment on the strength of association between this symptom and the different substances.

Although amphetamine use has been reported to be on the decrease as a street drug,<sup>7</sup> it is worth noting that amphetamines are present in the clinical setting as a treatment for ADHD. A recent article highlighted a case of a man who had been treated for ADHD with dexamphetamine and then developed delusions regarding his wife's fidelity.<sup>8</sup> The authors raise concerns about the increased prescribing of stimulants for therapeutic use and the possibility of increasing the incidence of morbid jealousy in the future. We would like to echo this concern.

### *Psychopathology*

Morbid jealousy often, but not always, represents an 'overvalued idea'. An overvalued idea describes

an isolated preoccupying belief, neither delusional nor obsessional in nature, which comes to dominate the sufferer's life.<sup>9</sup> In a comprehensive review of the topic,<sup>9</sup> McKenna suggests that states of abnormal sexual jealousy have invariably been separated into three distinct clinical entities. One presentation takes the form of an excessive possessiveness, which appears in otherwise undisturbed personalities, is similar in quality to normal jealousy, and seems to represent an exaggeration of it. The other extreme is delusional or psychotic jealousy, describing a recognisably delusional belief in a partner's infidelity that may complicate a schizophrenic, affective or organic psychosis, occasionally to the point of dominating the clinical picture.<sup>10</sup>

In the third clinical presentation, morbid jealousy takes the form of an overvalued idea. Often following a trivial event that is misinterpreted, the patient becomes convinced that his partner is being unfaithful, typically indiscriminately. This belief is completely groundless or at least very disproportionate to any available evidence, but becomes intense, preoccupying and leads the patient to engage in a great deal of inappropriate activity. Patients make continual accusations based on pieces of flimsy, trivial and contradictory evidence. They make constant attempts to verify their accusations: following the partner, examining the state of their partner's underwear and setting ingenious traps. Any equivocal findings are interpreted as positive proof of lack of faithfulness.

Our patient seems to fall within the category of delusional jealousy. He seems, given the extent and development of his false beliefs, to be suffering from a paranoid psychosis. Amphetamine psychosis seems to be the most parsimonious explanation for his mental state.

Amphetamine-induced psychosis has been extensively studied because of its close resemblance to schizophrenia. Amphetamines have their primary effects by causing the release of catecholamines, particularly dopamine, from presynaptic terminals.<sup>11</sup> This was part of the evidence for the dopamine hypothesis in the aetiology of schizophrenia. However, one has to remember that amphetamine use, as well as causing psychosis, can also cause relapse, or worsen existing symptoms, of functional psychosis.<sup>12</sup>

### *Risk assessment and management*

Amphetamine-induced jealousy is associated with many problems when it comes to managing the individual's risk. People suffering with morbid jealousy will behave unpredictably and often in a high-risk manner. Higher levels of violence are reported, especially violence towards the suspected partner,<sup>2</sup> and also towards third parties suspected to be the love rival. When an acute amphetamine-induced psychosis is added to this, patients are likely to become much more paranoid and be at higher risk. One has to be aware that risk assessment is a dynamic process as the degree of risk may vary over time.

In this case, one has to be vigilant to the possible risk the patient may pose to his two-year-old son. One has to consider liaising with child protection services, preferably with the mother consent. This aspect was continuously assessed and at no point did this patient seem to pose a risk to his son. However, our patient had continued to display aggression to his partner, most recently leaving threatening messages on her answer phone, despite being separated from her. A referral to forensic psychiatrist's assessment as well as the use of legal means to protect the mother, *ie* involving the

police and applying to the court for injunction, are important aspects to risk assessment and management in such cases.

We feel that the link between morbid jealousy and amphetamine use needs to be emphasised. When a patient initially presents, possibly to addiction services or even general practice, with what seems to be a simple addiction they need to be assessed for delusional jealousy, which may not be so obvious. The same applies to patients who are prescribed amphetamines for any reason. Risk needs to be assessed with regards to the patient themselves, their partner, the suspected love rival and other third parties, whom the patient may suspect of aiding the partner to cover up.

The risk associated with morbid jealousy requires that clinicians be aware of this psychotic symptom. We hope to have drawn attention to this lesser known association with amphetamines, whether they are misused or used therapeutically for other mental disorders.

### Conflicts of interest

None.

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