

Psychiatric Assessment in Patients with Acute Cocaine Toxicity

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Supervia et al, in their article in this issue, have looked at factors which influence the need for a psychiatric assessment in patients presenting to the Emergency Department (ED) with cocaine intoxication¹. Over the two year period of the study, 21% of the 327 cases seen in their ED with cocaine intoxication had a psychiatric evaluation. They found that a number of factors were associated with a patient having a psychiatric assessment. Logistic regression analysis showed that co-use of benzodiazepines, past psychiatric history and the absence of neurological symptoms were independent risk factors for patients having a psychiatric assessment. However, it is not clear in their study whether standard criteria were used by clinicians in their ED to determine whether there was the need for a psychiatric referral and 'neurological symptoms' were not defined.

Cocaine use was confirmed in their study by anamnesis, clinical symptoms and urine toxicological screening. The screening method used was qualitative rather than quantitative, and therefore it was not possible to correlate cocaine concentrations with the need for a psychiatric assessment. Additionally, the qualitative assay looked for the presence of the metabolite of cocaine, benzoylecgonine, rather than the parent cocaine. Furthermore, the study population did not appear to have overt clinical features of sympathomimetic toxicity, as demonstrated by the normal mean systolic blood pressure and heart rate reported in Table 1. This in addition to the fact that benzoylecgonine remains detectable in urine for several days following cocaine use² means that there is not possible to determine the proportion of patients in this study who had acute cocaine toxicity at the time of presentation to the ED.

In this study, there was an association between

co-ingestion of benzodiazepines and the need for psychiatric assessment. The authors suggested that use of benzodiazepines may have alerted clinicians to a potential underlying anxiety disorder. We feel that this is an unexpected finding as benzodiazepines decrease the neuro-psychiatric and sympathomimetic toxicity seen with acute cocaine use³. In a study of patients exploring substance use in a population with first-episode psychosis, approximately 40% reported use of cocaine; however, in contrast to the findings reported by Supervia et al, only 5% self-reported benzodiazepine use^{1,4}. In addition, in our clinical experience, there are a proportion of individuals using sympathomimetic drugs, such as cocaine, who self-medicate with benzodiazepines to ameliorate some of the unwanted effects of these drugs. These effects include stimulant-induced bruxism and managing the 'come-down' following stimulant use. Therefore, whilst there is a possibility, as suggested by Supervia et al that benzodiazepine use may be associated with underlying anxiety disorder, there are other reasons why those with cocaine intoxication report use of benzodiazepines and/or have benzodiazepines detected on toxicological screening.

Supervia et al have highlighted some of the previously published literature exploring whether there is a link between cocaine use and psychiatric disease¹. There have been other published studies in this area, further supporting the authors' hypothesis. In a prospective longitudinal study of 266 men admitted for cocaine dependency treatment, those who remained cocaine abstinent had lower rates of psychiatric morbidity⁵. Those who relapsed and restarted cocaine use following initial treatment had higher rates of depressive and psychotic disorders and higher use of psychophar-

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RECEIVED: 22-2-2010. **ACCEPTED:** 26-2-2010.

CONFLICT OF INTEREST: None

macological treatments. In a US study of 476 drug users, the risk of psychotic symptoms increased in those who abused or who had dependence on cocaine, particularly those individuals with 'moderate' or 'severe' cocaine dependence⁶. It has been suggested that use of stimulant drugs such as cocaine is higher in those with psychiatric morbidity particularly schizophrenia and other psychoses. In a study in Oslo, Norway self-reported life-time illicit use of amphetamines / cocaine was 160% higher in those patients with schizophrenia or bipolar disorder than in a control general population sample⁷.

In their study, Supervia et al found that there was a trend to lower use of cannabis in those who had a psychiatric assessment (14.3% vs 22.5%)¹. Cannabis use in this study was based on either self-report of concomitant cannabis use or urinary detection of cannabis by enzyme immunoassay. No data collected in this current study as to whether those identified in this way were chronic cannabis users. There is an extensive literature suggesting a causal link between chronic cannabis use and psychiatric morbidity^{8,9}. Recent changes in the THC (tetrahydrocannabinol) content of cannabis in the UK and concern about the implications for psychiatric morbidity associated with this has led to changes in the legal classification of cannabis¹⁰.

This study by Supervia et al raises the interesting question as to whether all patients presenting to the ED with acute cocaine intoxication should have a psychiatric evaluation. We feel that in addition to psychiatric assessment for the management of psychosis and/or other significant neuro-behavioural symptoms not settling rapidly with initial ED treatment, there are other reasons for psychiatric evaluation in those with cocaine intoxication. There are individuals who present with

acute cocaine intoxication who may have underlying problem drug use. These individuals may benefit from similar brief interventions to those that have been shown to be effective in problem alcohol use¹¹. Supervia et al have made a start at attempting to identify patients with cocaine intoxication who should have a psychiatric assessment¹. However, we feel that further work is required not only to fully determine and validate these factors, but also to look at the role of brief interventions in those presenting to the ED with cocaine intoxication.

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