

## Short Report

### Cocaine dependence: A case series from India

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#### ABSTRACT

**Background.** Cocaine use and dependence is a well-known phenomenon in the West but has not been reported in the medical literature from India, despite recent media reports of its use by drug abusers and seizure by authorities.

**Methods.** We report 5 patients with cocaine dependence who came for treatment to the Department of Psychiatry, Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh.

**Results.** All the patients were young adult men (age range 20–27 years). They were either unemployed or in medium-level occupation. All used cocaine by 'snorting' (inhaling cocaine hydrochloride salt in a powder form through the nose so that cocaine gets rapidly absorbed into the bloodstream through the nasal mucosal epithelial capillary vasculature). None reported smoking or inhaling the vapour of heated freebase cocaine ('crack'). All reported intense and specific craving for cocaine (and met criteria for dependence syndrome as per ICD-10), though 3 patients were also dependent on opioid preparations (heroin, dextropropoxyphene or codeine-containing cough syrups). We started them on clonidine for opioid detoxification followed by naltrexone. Since there is no approved medication for cocaine withdrawal or relapse prevention, our focus was on relapse prevention counselling using cognitive behavioural principles. The outcome was variable.

**Conclusion.** Cocaine dependence is present among the population in India. Patients are not necessarily from the affluent class. This case series of cocaine dependence, the first from India, intends to be both a curtain raiser and an eye-opener.

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#### INTRODUCTION

Cocaine is considered to be the most addictive recreational drug; it is abused by snorting, injecting or smoking and rarely by the sublingual route.<sup>1–3</sup> Cocaine abuse is a major social health problem in the West with a recent upsurge in its popularity. It contributes to disturbing social crises, including violent crime, unsafe streets,

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accidents, unnecessary medical costs, the spread of infectious disease (e.g. AIDS, hepatitis and tuberculosis), failure in school and work performance. Cocaine abuse has also been reported in the elderly population. The psychiatric and physical adverse effects of cocaine are also well known.<sup>1,2</sup>

The UN World Drugs Report 2011 highlights the Asian scenario where cocaine, which was originally meant for trafficking only, is now being pushed for consumption by organized groups. Also there are reports of cocaine use and seizures from markets.<sup>4</sup> The media has been highlighting its increasing use and seizures in India. The upwardly mobile population in metropolitan cities has been identified as a reason for India's rising demand for cocaine.

Despite cocaine dependence being a long-established phenomenon in the West and several recent seizures of cocaine in India as well,<sup>5,6</sup> just one case has been reported from India and that too an ophthalmic complication and not cocaine dependence.<sup>7</sup> To the best of our knowledge and literature search, there are no published reports of cocaine abuse or dependence from India till date. We present a series of 5 patients with cocaine dependence syndrome from India.

#### THE CASES

We encountered 5 patients with cocaine dependence at the Drug De-addiction Treatment Centre, Department of Psychiatry, Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh. The diagnosis of dependence was based upon the criteria of ICD-10.<sup>8</sup> The diagnosis was established in each case by a clinical interview, collateral information, inpatient observation in the admitted cases, and confirmation of diagnosis by the consultant psychiatrist.

#### Case 1

A 27-year-old unmarried man working with his father in an electrical appliances store presented with a history of smoking cigarettes, chasing heroin and snorting cocaine ('snorting' refers to inhaling cocaine hydrochloride salt in a powder form through the nose so that cocaine gets rapidly absorbed into the bloodstream through the nasal mucosal epithelial capillary vasculature) since 17 years of age. His academic performance suffered with frequent failures in examination because of the drug-taking habit. He started taking loans from his friends, and would steal money from his own house for procuring drugs. His parents came to know about his drug abuse when the local drug lord threatened to kill him if he did not pay the money owed for the drugs taken on credit. The patient was admitted, detoxified with oral clonidine, and discharged on oral naltrexone 50 mg/day after focusing on occupational rehabilitation and environmental manipulation. He remained abstinent for a few months but following the break-up of a romantic relationship with his girlfriend, he restarted chasing heroin and snorting cocaine. He would feel intense craving for cocaine and would also develop withdrawal symptoms in the form of restlessness, body ache, sleep disturbances, lacrimation, sneezing, yawning and loose motions whenever he would not chase heroin. Slowly, frustration set in regarding his life and career and he sought treatment. Detoxification with oral clonidine was done and oral naltrexone 50 mg/day started in the inpatient setting. Relapse prevention counselling was done using cognitive behavioural principles. He remained on follow-up for around 2

months being abstinent, following which he dropped out.

#### Case 2

A 20-year-old unmarried man, mechanical engineer, who was unemployed at the time of presentation, with a family history of opioid and cocaine dependence in his cousin (detailed as case 3) presented with snorting cocaine out of curiosity with his friends since the age of 17 years. He felt energetic and elated, and hence started taking cocaine daily. If he was not able to take cocaine, he would feel weak and have vague pains throughout the body. He developed intense craving for cocaine. To get relief of these symptoms, he would sometime take dextropropoxyphene capsules. His academic performance deteriorated and he failed in four subjects in his third semester. He told his family members about his substance use and sought treatment from a local practitioner. He remained abstinent for 3–4 months but again started snorting cocaine because of craving. He finally reported to us in July 2011 and was admitted. Monitoring of withdrawal symptoms was done (the patient reported insomnia and restlessness) and managed. Long-term treatment with oral naltrexone was started. Relapse prevention counselling was done using cognitive behavioural principles. The patient has remained abstinent ever since and is on regular follow-up.

#### Case 3

A 24-year-old unmarried man, educated up to class IX, unemployed at the time of presentation, with a family history of cocaine dependence by his cousin (detailed as case 2) presented to us. He started consuming dextropropoxyphene capsules with his friend out of curiosity at the age of 16 years and gradually became dependent. He would spend all his time in procuring capsules, became disinterested in his studies and left school after class IX. When his family members came to know about his drug use, they started putting restrictions on him. Meanwhile, he was introduced to cocaine by his friends and had a sense of 'high' and elation on snorting, hence started taking cocaine daily. While increasing the amount of cocaine, he reduced the intake of dextropropoxyphene capsules. He started ignoring his duties and had frequent altercations with his family members who finally convinced him to seek treatment. He was started on treatment on an outpatient basis but failed to comply, so he was admitted to the hospital and monitoring of withdrawal symptoms was done and managed. Long-term prophylaxis with oral naltrexone 50 mg/day was started and relapse prevention counselling was done as previously. The patient continues to remain abstinent since and has been on regular follow-up.

#### Case 4

A 27-year-old married man, educated till class XI, unemployed at the time of presentation, a resident of London, UK, snorted cocaine for the first time on the suggestion of a friend at the age of 25 years and enjoyed the 'high'. He started to snort cocaine every day and would have a strong desire for the same, which he would not be able to control. He started spending more time in procuring and using the substance, and working only when he needed money for the cocaine. He decreased time spent at home and interacting with family. He started asking for money from family members, lying about the reason he needed money, and on occasions, used his parents' credit cards secretly. On days when he was not be able to snort cocaine, he would feel irritable, fatigued, and have dull aching pain and stiffness in the back of the neck. To get relief from the withdrawal symptoms, he started

using methadone procured from a friend, illegally. He came to India and sought treatment. Monitoring of withdrawal symptoms was done in an inpatient setting and he was managed with symptomatic treatment. Psychoeducation regarding his illness, course, prognosis and management was started with the patient and family members. However, he left against medical advice and did not follow-up with us.

#### Case 5

A 26-year-old unmarried man, shopkeeper by profession, educated till class XII, presented with smoking cigarettes since the age of 16 years, drinking codeine-containing cough syrup since 20 years of age and snorting cocaine for the past 6 months. Following successful outpatient detoxification from codeine, some of his old friends introduced him to cocaine, which he snorted and felt extremely pleasurable, enjoying the sensation of 'high'. He soon started snorting cocaine daily. He developed an intense craving for it; however, he denied any physical symptoms on not taking it. Realizing that it would harm him if he continued using cocaine, he again sought treatment. He was again started on outpatient management with a focus on counselling to prevent relapse. Oral naltrexone 50 mg/day was started for long-term treatment. The patient has been on regular follow-up ever since and claims complete abstinence.

## DISCUSSION

All our index patients were young adult men in the age range of 20–27 years. All used cocaine hydrochloride powder by 'snorting' rather than by the other common routes (injection and smoking). None reported smoking or inhaling the vapour of heated freebase cocaine ('crack'). All reported intense and specific craving for cocaine (and met the criteria for dependence syndrome as per ICD-10), though three patients were also dependent on opioid preparations (heroin, dextropropoxyphene or codeine-containing cough syrups) and were managed in the inpatient setting primarily for opioid dependence, with clonidine-assisted detoxification and naltrexone maintenance. Since there is no approved medication for cocaine withdrawal or relapse prevention, our focus was on counselling to prevent relapse using cognitive behavioural principles. Despite this, the follow-up record even in the short term was rather poor, highlighting the difficulties in treating such cases and following them up.<sup>1</sup>

Cocaine use is perhaps infrequent in India, as it is expensive, making it inaccessible to the vast majority of the country's population. This high cost gives it an air of exclusivity which makes it attractive, especially to young people, as 'a status symbol'.<sup>9</sup> Patients from higher socioeconomic strata may not be seeking treatment in government hospitals. However, none of our patients was from a high socioeconomic background. Most were middle class, often unemployed or holding medium-level occupations, and there was nothing 'special' or 'exclusive' about them in terms of their background or affluence. This report therefore defies the commonly held myth about the 'exclusivity' of cocaine and cocaine users. This has rather obvious and ominous implications in terms of spread of cocaine use in the general substance-using population.

Due to lack of availability of cocaine tests by urine screening or plasma testing procedures in our set-up, we could not biologically confirm the substance intake. On the other hand, because the patients themselves came for treatment with self-disclosure, there was no reason to doubt their motivation and statements. Also withdrawal symptoms were reported in some of the patients.

This case series is best seen as a 'tip of the iceberg'.

Cocaine abusers may present with multiple complaints of specific and non-specific symptoms that require diligent assessment to be recognized as being cocaine-related. Therefore, it is essential that medical personnel should know about the effects of cocaine and the symptoms of cocaine abuse to manage this menace properly. In this sense, this case series intends to be both a curtain raiser and an eye-opener.

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