# **Case Report – Cocaine induced venous sinus thrombosis**

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#### **ABSTRACT**:

**Background**: A substance use disorder (SUD) is a mental disorder that affects a person's brain and behavior, leading to a person's inability to control their use of substances such as legal or illegal drugs, alcohol, or medications. Cocaine impairs cognitive development (capabilities of learning), including associative processes; free recall of previously learned items is often impaired when cocaine is used both during learning and recall periods.

**Aim & Objective**: To assess the clinical features and outcome of Substance (cocaine) abuse disorder.

Case summary: A 18 year old male patient came to OPD with chief complaints of Vomiting, unable to eat and speak since 4-5 days. Patient had history of cocaine abuse since 1 month. He was conscious but not oriented with time, place and person at time of admission. On blood investigation, Hypochromic Microcytic anemia found, all other parameters were normal. On MRI of brain, Contrast related opacification noted involved left transverse sinus, left sigmoid sinus and proximal part of left internal jugular vein, suggestive of partial thrombosis.

Conclusion: Individual with cocaine abuse is admitted in de- addiction center and they were under appropriate treatment regimen. Here a case report of individual with cocaine use disorder has been given to develop in-depth knowledge regarding the disorder.

**Keywords**: Substance abuse, cocaine, cognitive disorder, addiction.

# I. INTRODUCTION:

The detrimental or dangerous use of psychoactive drugs is referred to as substance misuse. That is one of the biggest issues facing the globe right now, especially among young people. Drug misuse incidents and associated antisocial conduct have dramatically increased. A psychoactive substance that affects perception is cocaine. Among cocaine users, there has also been

hazardous usage and dependency. It includes tertahydrocannabinol (TCH), which is the chemical component triggering the effects. Charas and ganja are often smoked, however bhang is always consumed orally in India, either as a beverage or a sweet. Happiness, mild hallucinations, an increase in appetite, and a decrease in anxiety are among the side effects. [1] According to estimates, 275 million individuals used illegal substances like cocaine, marijuana, amphetamines, and opioids in 2016, for an annual prevalence of 5.6%. With 192 million users globally, cocaine is the most popular drug.[2] Worldwide, illegal drugs like cocaine are responsible for 2% of the disability-adjusted life years (DALYs) for young people. [3]

In India, there are reportedly 31 million cocaine consumers. The prevalence of current cocaine usage among the general population (10-75 years), all males, all females, children (10-17 years), and adults (>18 years) is 2.8%, 5.0%, 0.6%, 0.9%, and 3.3%, respectively, according to the National Drug Dependency Treatment Center at AIIMS in New Delhi.In all, 0.25% of Indians use cocaine habitually. [4] India was recently thought of as a nation for drug transit from the Golden Triangle and Golden Crescent. Although the Golden Crescent has a considerably longer history of opium production than Southeast Asia's Golden Triangle. [5] The impact of substance dependence is devastating irrespective of age, race, gender but the prevalence of substance abuse varies across age and gender groups.[6]

There is lack of literature regarding specific cocaine substance abuse disorder, so present case study was conducted.

**Aim & Objective**: To assess the clinical features and outcome of Substance (cocaine) abuse disorder.

Case summary: A 18 year old male patient came to OPD with chief complaints of Vomiting, unable to eat and speak since 4-5 days. Patient had history of cocaine abuse since 1 month. On general examination of patient, temperature was afebrile,

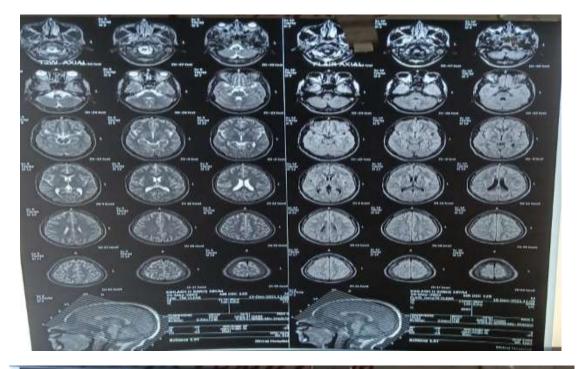


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pulse 60/min, and rate blood pressure 110/70mmhg. He was conscious but not oriented with time, place and person at time of admission. On blood investigation, haemoglobin was 9.8 gm/dl, Hypochromic Microcytic anemia found, all other parameters were normal. The LDH level was 309 mg/dl and the uric acid level 6mg/dl. In CSF

examination, in gram stain few pus cells were seen, while acid fast bacilli not seen and KOH stain no fungal growth observed. On MRI of brain, Contrast related opacification noted involved left transverse sinus, left sigmoid sinus and proximal part of left internal jugular vein, suggestive of partial thrombosis.

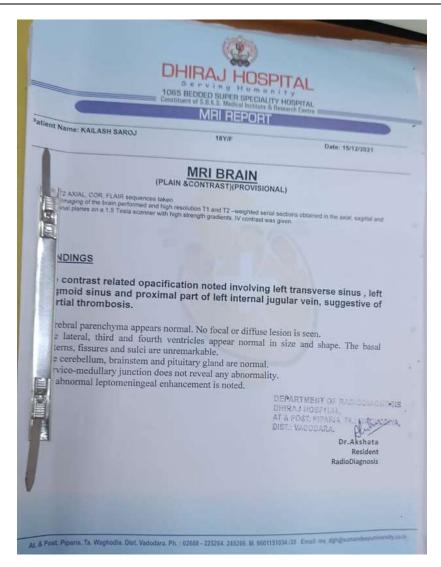






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#### II. **DISCUSSION:**

Worldwide substance misuse and usage is quickly taking on pandemic proportions [7]. Teenagers and young adults are increasingly concerned about it [8]. A wide range of substanceinduced mental disorders have been linked to substance use [9]. These disorders can be caused by substances directly through biological mechanisms or indirectly through varying degrees of the emotional toll that stressful events have on users either independently or as a result of substance use. It might be challenging to pinpoint the root causes of mental diseases due to the toxic effects of psychoactive drugs [10].

use. The misuse, intoxication. withdrawal from the relevant psychoactive drug is often the direct cause of substance-induced illnesses, which are different from co-occurring mental disorders [11]. The manner that various people react to drug withdrawal or intoxication

varies.Reddy and Chandrashekhar et al, [12] conducted a meta-analysis and found that the overall prevalence of drug use in India was 6.9 per 1000 people. Our study, however, found that the total prevalence was 357.7 per 1000 people, or 35.77 percent higher. Also, this suggests that there has been an upward tendency over the past 20 years. In this overview, Chandigarh (29.33%) has the highest prevalence of cocaine usage, followed by Punjab (12.39%), Bangalore/Karnataka (2.90%), Lucknow/Uttar Pradesh (1.20%), and Gujarat (1%).

Studies conducted in various states varied significantly, and statistics from the National Drug Dependency Treatment Center (NDDTC) for 2019 show this. The selection of study participants and the small sample size may be to blame for the large range. According to NDDTC, other causes for this vast range and overall low incidence may include state prohibition laws imposed to make cocaine use illegal and certain societal norms about its use. This



study does, however, have a number of limitations, including the heterogeneity of the studies and sample size, as well as regional and state differences.[13]

## III. CONCLUSION:

There is a sizable "at risk" population in India who may use cocaine. The epidemic of drug usage among young people has grown to worrisome proportions. O The Narcotic Drugs and Psychotropic Substances Act, 1985 is the primary statute in India that governs cocaine use. Nonetheless, each state has its own regulations governing the use, possession, sale, and purchase of marijuana. Either a law has to be changed, or society as a whole needs to adjust its behaviour. The results of several surveys on cocaine usage among the population that are periodically undertaken can be helpful in determining the prevalence and pattern of cocaine use.Individual with cocaine abuse is admitted in de- addiction center and they were under appropriate treatment regimen. Here a case report of individual with cocaine use disorder has been given to develop in-depth knowledge regarding the disorder.

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