

Short Communication -Orodonal Perspective of Substance Abusers

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Abstract

Substance Abuse is the habitual taking of illegal drugs by an individual or a group of people. Most commonly used these kind of drugs are Marijuana, Cocaine, Amphetamines, Heroin, Hallucinogens etc.... The oral cavity reflects, the deleterious effects of these drugs. This short communication attempt to highlight the various clinical manifestations of these drugs seen in oral cavity.

Keywords: Marijuana, Cocaine, Amphetamines, Heroin.

Introduction

According to the report given by All India institute of medical science and National drug dependence treatment centre for the year 2018 cannabis in most commonly used drug with the Indian population range of 2.8% of Indian population.(3 crore peoples).

Despite of various of routes like inhalation, snorting, intravenous, boofing, skin popping, oral administration stands first.

Marijuanas/ Cannabis:-The several psychoactive preparations from the plant Cannabis sativa is used to call in the generic name of Cannabis. The major psychoactive constituent in cannabis is tetrahydrocannabinol (THC). Cannabinoids are the compounds which are structurally similar to THC.^[1] The unpollinated female plants are called hashish. Cannabis oil (hashish oil) is a concentrate of cannabinoids obtained by solvent extraction of the crude plant material or of the resin. It is a psychoactive drug and it is served as an entheogen in various places.. About 147 million people, 2.5% of the world population,

consume cannabis (annual prevalence) compared with 0.2% consuming cocaine and 0.2% consuming opiates^[2]. In Worldwide, United states stands first, whereas India stands tenth place in cannabis production and cultivation. Uttarakhand will be the first State in India together the legalization of commercial cultivation of cannabis by the state government.

Cannabis causes dry mouth, easily wear away the enamel due to the imbalance of acids causes erosion of teeth. A syndrome called "Cannabinoid hyperemesis" is a condition characterised by repeated and severe bouts of vomiting. Smokes of cannabis can also acts as a carcinogen leads to various premalignant and malignant condition. Using cannabis (in any form) before a dental procedure can negatively affect the type and amount of medication or sedatives, increases the tendency to bleed, and complicate the healing mechanism. For example administering local anaesthesia with adrenaline to a person who is a long term cannabis user may precipitate cannabis related tachycardia and hypertension. Likely they also having higher risk of getting acute bronchitis, in such that conditions NSAIDS should be contraindicated^[3].

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Cocaine :-Cocaine is obtained from the leaves of Erythroxylon coca (E. coca), also known as the coca scrub, a plant that grows in the Andean highlands of South America. Traditionally coca leaves have been chewed by people in the Andean countries of South

America for thousands of years. In India, Delhi is the place where cocaine marketing is high. Cocaine has a very powerful stimulating effect on the nervous system. It raises levels of dopamine, a neurotransmitter linked to pleasure, movement, and the brain's reward circuit. Cocaine dependence has become a substantial public health problem, resulting in a significant number of medical, psychological and social problems, including the spread of infectious diseases (e.g. AIDS, Hepatitis and Tuberculosis), crime, violence and neonatal drug exposure.

It is a strong stimulant and it is recreational drug. It is most commonly used in the form of cracked cocaine. It is a smoked form of cocaine but some of the users put it in the mouth it get absorbed in the gums causes mouth sores. Inhalation of cocaine alters the mucosa causing vasoconstriction and, it causes ulcerations and perforations to the mucosa of the hard palate and to the nasal septum of the palatine bone. Palatal perforation denotes the chronic use of cocaine. Cocaine may cause a movement disorder called transient chorea. Cocaine users also develop bruxism inturn giving rise to muscle spasms called "buccolingual dyskinesia"^[4].



Courtesy:-P Serrano-Sánchez , JV Bagán , Y Jiménez-Soriano , G SarrionUniversity of Valencia. Service of Stomatology, Valencia University General Hospital. Valencia, Spain .Perforation measuring 2 cm in diameter, located in the hard palate .affecting the midline.

Methamphetamines :-Methamphetamine is a powerful, highly addictive stimulant that affects the central nervous system. A range of other substances also fall into this group, such as methcathinone, fenetylline, ephedrine, pseudoephedrine, methylphenidate and

MDMA or 'Ecstasy' or molly – an amphetamine-type derivative with hallucinogenic properties. Methamphetamine abuse has three patterns: low intensity, binge, and high intensity. Low-intensity abuse describes a user who is not psychologically addicted to the drug but uses methamphetamine on a casual basis by swallowing or snorting it. Binge and high-intensity abusers are psychologically addicted and prefer to smoke or inject methamphetamine to achieve a faster and stronger high. In some cases, people take methamphetamine in a form of bingeing known as a "run," giving up food and sleep while continuing to take the drug every few hours for up to several days. Other common names for methamphetamine include blue, crystal, ice, meth, and speed^[5].

They are the potent CNS stimulant, produces euphoric stage in the users, often induces craving for carbonated sugary beverages. The dental signs of MA users are poor oral hygiene, gingival inflammation, xerostomia, rampant caries and excessive tooth wear. People using Methamphetamines shows a characteristic appearance called "Meth mouth appearance," which is severe tooth decay which often causes teeth to break and fall out. Meth causes blood vessels to shrivel and die, leads to gum disease^[6].



Courtesy ;-panpan Wang, Xinmen chen, liwei, zheng, Lan Guo, Xin Li, Simin shen, state key laboratory of oral diseases, Sinchuan university , Chengdu, Sichuan, China. Frontal intra-oral view of the patient showing 24 residual roots, four residual crowns with leathery and rampant brown carious lesions extending to the gums. Dental plaque and inflamed soft tissue can also be seen.

Heroin :-Heroin provides a burst or rush of good feelings, and users feel "high" and relaxed. This may be followed by drowsiness and nausea. Heroin is an opioid drug made from morphine, a natural substance

taken from the seed pod of the various opium poppy plants grown in Southeast and Southwest Asia, Mexico, and Colombia. According to the Economic times report, in India Afghanistan cultivating opium in large amounts. Oral manifestation characterised by rampant caries, xerostomia, periodontitis. It also causes gingival hyperplasia. Heroin usage may make it more difficult to achieve profound Local anesthesia. Users are more prone to viral, fungal infections. Most of the patients develop discolouration of tongue^[7].

Hallucinogens:

Drugs like Lysergic acid diethanamide, Mescaline, Psilocybin are the commonly used hallucinogens, they manifest more systemically rather than oral manifestation like anxiety, paranoia, and delusions, Distressing flashbacks and they always in euphoric stage^[8].

Conclusion

To summarize this short communication oral manifestations of substance abusers, varies from simple dental caries, ulcers, to the complex malignant lesions. The use of illicit drugs may require modification in the usual course of dental treatment also. So as a dentist we should aware about the oral manifestations of substance abusers and their required modifications during dental treatment. And also we have to counsel, motivate the patient to quit the habit by explaining them the hazardous effects of drugs and help them to overcome the addiction.

Ethical Clearance – Not required since it is a review article

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