

REVIEW ARTICLE OF OPIUM ADDICTION (*AHIPHENA VYASAN*) IN AYURVEDADr. Ritu Kapoor*¹ and Dr. Chandan Singh²¹Head of Department and Associate Professor, PG Department of Agad Tantra, PGIA, DSRRAU Jodhpur.²Head of Department and Associate Professor, PG Department of Dravya Guna, PGIA, DSRRAU Jodhpur.

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ABSTRACT

Opium addiction is a complex illness characterized by compulsive use of opioid drugs even when the person wants to stop, or when using the drugs negatively affects the person's physical and emotional well-being. Usually, it happens in the persons who continuously consuming opium and its derivatives. Sudden withdrawal of these substance causes severe psychosomatic issues. In addition to the patient's health, it also has social consequences. There are so many ways of consuming opium such as crude or its synthetic or semi synthetic forms. In India especially in Western Rajasthan the use of opium is considered as one of the traditions and they are widely following it too. Ayurvedic text have reference about the vyasan or addiction, while mentioning the madatyay adhyaya/ alcoholism, the detailed review is carried out here.

KEYWORDS: Opium disorder, addiction, withdrawal symptoms, psychosomatic disorder.

INRODUCTION

Opium addiction is rampant in Western Rajasthan especially in Vishnoi and Jaat community, with custom to feed opium to the guests coming to the house as a treat, also it helps in enhancing the laborer's working capacity, this practice has now turned into an addiction. It's prevalence along the regions of Rajasthan, (8.4%) Barmer, Jaisalmer (79%) and (6.9%) in Bikaner. In the classical text, opium was first described by Acharya *sharangadhara*, and its properties are *Tikta* and *Kashay rasa*, *Laghu*, *Ruksha*, *Sukshma*, *Vyavayi* and *Vikasi*, *Vedanasthapana*, *Nindrajanana*, *Shothahara* and *aakshepahara*. In beginning fruit of opium (Poppy) was used as vegetable preparation and this preparation had to called *Bhurji*. Gradually medicinal value and toxic effect were observed. Opium was used as a good pain reliever, anxiolytic, somatic agent, anti-diarrheal.

There are many reasons to start use of opium that are family traditions, frustration in life, anxiety, chronic tension, curiosity, friend circle, conspiracy, to remove tiredness & to increase physical strength. All these reasons make a person to getting addicted. Addiction is both physical and psychological inability of the person to stop taking the substance. While quitting the substance intake the patient will feel tremendous health effects which is called withdrawal symptoms, which is very hard for the person to cop up with, in order to maintain the process of quitting, person might be needed some medical assistance both mentally and physically, so Ayurvedic treatment would be beneficial as it is a

combined treatment of both physical and mental. Ayurveda has stated about the addiction years ago while explaining madatyaya. The causes, pathology, signs and symptoms, withdrawal symptoms everything has been well explained hereon.

MATERIALS AND METHODS

Vyasan (Addiction)

In ayurveda opioid addiction can be co-related with *ahiphena vysana*. There is no such direct description about the term *vyasana* is available in ayurveda, but indirectly *laghutryees brhatrayees* and other *nighantus* said about the term in different aspects in scattered way. In *charaka Samhita* there is term *vyasana* mentioned in some of the context but it means sorrow, same for *susruta* also but *susruta* while explaining the *rasayana* the term *vysana* is used and which possess some other meanings according to his commentator *dalhana* "The person who is addicted to any drug or alcohol, gambling, prostitution etc. Even though there was no direct correlation or mentioning for the term *vyasana* for addiction, acharyas used some other aspects to explain the addiction. Such aspects are *satmya*, *oka satmya*, *Madatyay*, *Panatyay*, *Vishonmada*, are few terms, which give clue about dependence found in *Samhita*.

Satmya means suitability to some things, which are favorable for one's own self. *Satmya* is also known as *upashaya*. *Hita* and *pathya* are frequently used synonyms for *satmya*. A substance conducive to an individual is called *satmya* and the use of such substances results in

the well-being of that individual. The term *satmya* is used to convey the idea of *okasatmya* (i.e. to make a substance conducive to the body by its habitual intake) also. It refers to habituation developed by practice/spontaneous exposure. It is an acquired type of *satmya* due to repeated or habitual use of a particular substance or following a particular regimen for a long time. By repeated use or spontaneous exposure in small quantities, the person gets adapted to a substance/regimen. It may or may not be beneficial for health in general.

The term addiction is used to describe anything from a desire to have or do something that gives pleasure, to a medical issue, to an uncontrollable compulsion according to modern Addiction is a primary, chronic, neurobiological disease, with genetic, psychosocial, and environmental factors. It is characterized by behaviors that include one or more of the following: impaired control over drug use, compulsive use, continued use despite harm, and craving. DSM-5 defines addictions as the most severe degree of the due to pervasive/excessive substance-use or behavioral compulsions/impulses. Repetitive drug use alters brain function in ways that perpetuate craving, and weakens (but does not completely negate) self-control This phenomenon – drugs reshaping brain function – has led to an understanding of addiction as a brain disorder with a complex variety of psychosocial as well as neurobiological (and thus involuntary) factors that are implicated in addiction's development.

Oka satmya (Dependance)

Regularly consuming a specific diet or engaging in certain behaviors can lead a person to become accustomed to them, a phenomenon known as Okasatmya. This habitual pattern, formed through consistent practice, is not necessarily harmful to health, as explained by Chakrapani's concept of Auchityata, which emphasizes the significance of continued practice (Abhyasat). When an unhealthy diet or behavior is repeatedly adopted, the body's tissues adjust to accommodate it, rendering it relatively harmless due to compensatory mechanisms. This condition, termed Okasatmya, is akin to drug dependence in some ways, yet it differs in several aspects. Unlike Okasatmya, drug dependence involves tolerance to specific amounts and manifests withdrawal symptoms upon cessation. Cravings and intense desires are characteristic of dependence but not typically associated with Okasatmya.

Dependance is a physical or psychological condition resulting from a mood-altering drug and it is characterized by compulsion to take drugs on continuous or periodic basis in order to experience its euphorogenic effect. If mood altering drugs are not available then they will develop some withdrawal symptoms, Drug dependence is a disease and maladaptive use of substance may never beneficial for health.

Tolerance

Drug tolerance or drug insensitivity is a pharmacological concept describing subjects' reduced reaction to a drug following its repeated use. Increasing its dosage may re-amplify the drug's effects; however, this may accelerate tolerance, further reducing the drug's effects. Drug tolerance is indicative of drug use but is not necessarily associated with drug dependence or addiction.

Opium addiction

Like any other substance addiction opium also has a huge impact on the health. Here we are considering opium addiction as its prevalence is greater in the western Rajasthan. Opium addiction, also known as opioid addiction, refers to a condition where an individual becomes dependent on and compulsively seeks out opioid drugs, including natural opiates like opium, as well as synthetic or semi-synthetic opioids such as morphine, heroin, oxycodone, and fentanyl. Opioids are substances that act on the brain's opioid receptors, leading to pain relief and a sense of euphoria. Addiction to opioids can have severe physical, psychological, and social consequences. It often begins with the legitimate use of prescription pain medications for medical purposes, and also as part of tradition or because of the peer pressure or to cop up with the stress but over time, some individuals may develop a tolerance to the drugs, requiring higher doses to achieve the same effects. This can lead to misuse, abuse, and eventually addiction. Opium is highly addictive narcotic known for its pain-relief and euphoric effects. It contains several alkaloids, including the well-known morphine and codeine, which are used medicinally for pain and cough relief. However, heroin, another derivative, is not used therapeutically and is commonly associated with abuse and dependence. Overall, there are 20 opioid chemicals used globally for various medical purposes.

According to ayurveda, addiction doesn't have any direct correlations except the madatyaya or alcoholism, as discussed earlier the oka satmya can also be related with the addiction. In case of opium addiction Ayurveda doesn't have any direct correlations or reference in those authentic ayurvedic books like charak, susuruta and ashtanga hridaya but later on many acharya have explained this in the light of management for example, according to *Acharya Priyavrita Sharma* the juice of the leaves of *Jyotismati* (*Celastrus anniculatus*) in the quantity of 40 ml is a remedy of longer opium dependence. *RasodharTantra* written by *Charantirth Maharaj* in 1964 has described one compound formulation for opium named as *Ahiphena Vyasanahari Vati*. It contains nine ingredients and one *Bhavana* of the decoction of Posta (poppy capsule) is to be given and pills were made. Further this drug is included in the *BheshajaSamhita* (Pharmacopoeia) published by the Gujarat Government. All these shows the reference of opium in ayurveda. While explaining alcoholism acharyas certainly explained the withdrawal symptoms as dwamsaka and viksheya, even though it cant be

corelated with the opium addiction we can consider this as an light to the opium addiction and its withdrawal because acharya already paved the way for it.

Ayurveda introduces the concept of "padansikakram," a unique method for tapering off abused drugs or replacing them, as suggested by Charak. Additionally, Ayurveda recommends recreational therapy and psychological counseling primarily for alcoholism, as per Charak's teachings. The following can be considered as the nidanas or causes of a person's getting addicted as per ayurveda. Disobey of right conduct (*Sadavrita*), No Control over self-desire (No coping response), Fickle mind or Unsteady (*Avarsatva*), *Vata* and *Pitta Prakriti* (*physical constitution*), *Manas Prakriti* (Role of psyche,) Maladaptive Use. All these can be concluded as a person with low self esteem or a person who is been into mal adaptive of food or drinks or daily activities are having more changes to become addicted.

Pathophysiology of opium addiction

According to Ayurveda, prolonged and continuous consumption of opium (Nidansevana) results in Praghya-apradha, leading to cognitive impairments such as Dhi, Dhrati, and Smarativibransha, ultimately depleting the individual's Satvabala and rendering them AvaraSatva. Satvavikara, Budhivikara, Indriyavikara, and Manovikara emerge as consequences of Avarstavata and the influence of drugs:

- Budhivikara manifests as delusion, delirium, and disorientation.
- Satvavikara diminishes willpower, weakens immunity, and reduces the ability to cope with challenges.
- Indriyavikara leads to physical dependency and opioid neuroadaptation.
- Manovikara clinically presents as a loss of spiritual strength and a sense of compulsion.

Opioid dependency or addiction arises from these four disorders. The confluence of various etiological and risk factors creates an environment where frequent opioid use becomes normalized. Opioid dependency refers to the relationship with Vikar, wherein it becomes exceedingly difficult to cease or reduce opioid usage once addiction sets in. Discontinuing opioids triggers withdrawal syndrome, prompting users to resume their opioid intake to alleviate these symptoms, perpetuating a vicious cycle. If negative factors such as environmental stressors or familial issues persist in an individual with Avarsatvata, relapse into opium addiction may occur.

Avarsatvata is characterized by an inability to effectively cope with challenges, coupled with a pleasurable experience derived from substance use. Interpersonal conflicts, peer pressure, involvement in illegal drug networks, and unemployment are examples of familial and environmental influences that compel individuals towards drug use According to modern science these are

the changes that happens in a person who is opium addicted.

Neurotransmitter Changes: Opium primarily affects neurotransmitter levels in the brain, particularly those involved with the body's reward system. It binds to opioid receptors in the brain, mimicking the effects of pain-relieving chemicals naturally produced by the body (endorphins). This binding increases dopamine release, a neurotransmitter associated with pleasure and reward, which reinforces drug-taking behaviour.

Brain Structure Changes: Long-term use can alter the brain's structure, particularly areas responsible for judgment, decision making, learning, memory, and behaviour control.

Opium withdrawal symptoms

Opioid addiction involves continued usage despite negative consequences and the onset of withdrawal symptoms upon cessation. It encompasses both addiction to and dependence upon opioids. Although Ayurvedic texts do not directly detail withdrawal and its clinical manifestations, Acharya Kashyapa described Panopkarama, denoting a cluster of clinical manifestations resulting from the abrupt cessation of alcohol. Additionally, Acharya Charaka noted that individuals with self-control (Jeetendriya) do not exhibit psychosomatic manifestations following the sudden discontinuation of intoxicating substances like alcohol, opium, or cannabis. This suggests that individuals lacking self-control may experience psychosomatic manifestations upon sudden withdrawal from these substances.

In modern perspective opium withdrawal symptoms can vary in intensity and duration depending on factors such as the individual's usage pattern, the amount consumed, and their overall health. Opium is an opioid drug derived from the opium poppy plant and contains compounds like morphine and codeine. Withdrawal from opium and its derivatives can be challenging and uncomfortable.

Clinical Opiate Withdrawal Scale (COWS) is a method used by practitioners to measure the severity of a patient's withdrawal symptoms. This method consists of a series of 11 topics each comprising 4 - 5 common symptoms experienced by a patient undergoing opioid withdrawal.

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| Patient's Name: _____ Date and Time ____/____/____:_____ | |
| Reason for this assessment: _____ | |
| Resting Pulse Rate: _____ beats/minute <i>Measured after patient is sitting or lying for one minute</i> 0 pulse rate 80 or below 1 pulse rate 81-100 2 pulse rate 101-120 4 pulse rate greater than 120 | GI Upset: over last 1/2 hour 0 no GI symptoms 1 stomach cramps 2 nausea or loose stool 3 vomiting or diarrhea 5 multiple episodes of diarrhea or vomiting |
| Sweating: over past 1/2 hour not accounted for by room temperature or patient activity. 0 no report of chills or flushing 1 subjective report of chills or flushing 2 flushed or observable moistness on face 3 beads of sweat on brow or face 4 sweat streaming off face | Tremor observation of outstretched hands 0 no tremor 1 tremor can be felt, but not observed 2 slight tremor observable 4 gross tremor or muscle twitching |
| Restlessness Observation during assessment 0 able to sit still 1 reports difficulty sitting still, but is able to do so 3 frequent shifting or extraneous movements of legs/arms 5 unable to sit still for more than a few seconds | Yawning Observation during assessment 0 no yawning 1 yawning once or twice during assessment 2 yawning three or more times during assessment 4 yawning several times/minute |
| Pupil size 0 pupils pinned or normal size for room light 1 pupils possibly larger than normal for room light 2 pupils moderately dilated 5 pupils so dilated that only the rim of the iris is visible | Anxiety or Irritability 0 none 1 patient reports increasing irritability or anxiousness 2 patient obviously irritable or anxious 4 patient so irritable or anxious that participation in the assessment is difficult |
| Bone or Joint aches If patient was having pain previously, only the additional component attributed to opiates withdrawal is scored 0 not present 1 mild diffuse discomfort 2 patient reports severe diffuse aching of joints/muscles 4 patient is rubbing joints or muscles and is unable to sit still because of discomfort | Gooseflesh skin 0 skin is smooth 3 piloerection of skin can be felt or hairs standing up on arms 5 prominent piloerection |
| Runny nose or tearing Not accounted for by cold symptoms or allergies 0 not present 1 nasal stuffiness or unusually moist eyes 2 nose running or tearing 4 nose constantly running or tears streaming down cheeks | Total Score _____ The total score is the sum of all 11 items Initials of person completing assessment: _____ |

Score: 5-12 = mild; 13-24 = moderate; 25-36 = moderately severe; more than 36 = severe withdrawal

Opium as visha

Opium is considered as one of the *upavisha*. The drugs, which have *Vyavayi*, *Vikashi*, *Sukshma* (subtle), *Chedana*, *Madakari*, and *Yogavahi Guna* is called *Visha* or poison as per *sarangadgara*. Opium is also having *Vyavayi*, *Vikashi*, *Sukshma*, *Madakari* and *Yogavahi Guna* so once it entered the body it will mix with the blood & finally reach the *hrdaya*, which is considered as the abode of *ojas* leads to the depletion of *ojas* and thus shows the *ojakshaya lakshanas*. Which include the following, *Murcha* (unconsciousness or fainting), *Mansakshaya* (decrease of muscle) *Moha* (mental disturbances especially in judgement), *Pralap* (delirium), *mrityu* (death), this can be correlated with the withdrawal symptoms of opium.

Chronic toxicity of opium

Opium addiction leads to various detrimental effects due to prolonged and continuous exposure to natural, synthetic, or semi-synthetic derivatives of opium. Acharya Bhavprakash noted that long-term ingestion of opium or its derivatives can cause numerous harmful effects including the aggravation of *Vata dosha*, which is characterized by ethereal (light), cold, dry qualities, and bitter and astringent tastes. This can also lead to constipation due to its binding nature. Other serious symptoms of prolonged opium use include delirium (*Pralap*), tissue degeneration (*Dhatu-shoshak*), recurring unconsciousness (*muhurmuhur Mohakara*), and sterility in both men and women (*punsatvanashaka*). Predominantly, *Vata dosha* is disrupted, followed by *Pitta* and *Kapha doshas* due to the chronic toxicity of

opium. The chronic impact of opium addiction also harms various bodily channels such as the channels of the mind, breath, reproductive tissues, nutrients, and blood. During the withdrawal from opium, Vata dosha is particularly disturbed, followed by Pitta and Kapha doshas, affecting the same channels especially when opium intake is abruptly discontinued.

DISCUSSION

While ancient Ayurvedic texts such as the *Brhatrayi* and *Laghutrayi* do not explicitly mention terms like drug dependence or addiction, they introduce concepts like *Vyasan* (addictive habits), *Okastmya* (habituation), *Madatyay* (intoxication beyond limits), *Panatyay* (excessive consumption), and *Vishonmada* (poison-induced insanity). These terms suggest an early recognition of the dynamics of dependence and the complex nature of withdrawal symptoms. Ayurvedic Acharyas, utilize these insights, along with traditional Ayurvedic principles, to diagnose, prevent, and manage addiction-related disorders.

In the context of drug dependence and addiction, these conditions are characterized by both psychological and physiological components, significantly affecting the individual's body, brain, behavior, and their interaction with the environment. Opioid use disorder, for instance, showcases the severe consequences of such addictions, marked by compulsive use and intense withdrawal symptoms when use is stopped.

In Ayurveda, opium is referred to as *Ahiphena* and is traditionally recognized for its analgesic, sedative, and anticoagulant properties. However, Ayurvedic texts like *Bhavprakash* and *Madanpal Nighantu* also warn of the severe side effects from prolonged use, such as delirium, tissue deterioration, unconsciousness, and sterility, thus underlining the substance's dual nature. Additionally, opium is categorized as a poison, and Ayurveda includes a specialized branch dealing with poisons and their effects on the body.

The historical documentation, pharmacological attributes, therapeutic applications, addiction dynamics, pathophysiology, and management strategies related to opium are indeed scattered throughout Ayurvedic literature. By decoding and synthesizing these references, there is an opportunity to establish a dedicated field within Ayurveda focused on providing personalized care for patients dealing with substance addiction. These Ayurvedic references provide clear evidence that the effects and implications of opium were well-understood, underlining its practical importance and historical relevance in medical science. This comprehensive approach not only enhances understanding but also aids in the holistic management of addiction using Ayurvedic principles.

CONCLUSION

In conclusion, the challenge of opium addiction remains a critical issue in contemporary society, affecting not only the individuals struggling with dependency but also casting a wide net of impact on their social environments and mental health. The necessity to address and mitigate these effects is more pressing than ever. Ayurvedic medicine has emerged as a formidable alternative, offering new hope and methods by revisiting and revitalizing the ancient wisdom of the Acharyas. As Ayurvedic practices gain more recognition and validation, they offer a new hope for practitioners and patients alike, potentially setting a new standard in addiction therapy that could influence future approaches globally.

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