

# An Ayurvedic Management of Tobacco Addiction-A Case Study

\*1Dr. Shubhangi Sharma, 2Dr. Anita Sharma, 3Dr. Bhupendra Kumar and 4Dr. Brijaish Kumar Chawla

\*1, 3, 4P.G. Scholar, Department of Agada Tantra, National Institute of Ayurveda, Jaipur, Rajasthan, India.

<sup>2</sup>Professor & HOD, Department of Agada Tantra, National Institute of Ayurveda, Jaipur, Rajasthan, India.

#### Abstract

This case study explores the application of Ayurvedic medicine in managing tobacco addiction, emphasizing a holistic approach to cessation and withdrawal management. Tobacco addiction is a major health challenge, leading to severe physical, mental, and economic consequences. The study discusses the use of Ayurvedic principles, combining herbal medications, Panchakarma therapies, yoga, and meditation to address the physical and psychological aspects of addiction. A 20-year-old patient with a high dependency on tobacco was treated using a structured regimen that included awareness and counseling, specific herbal formulations like Khadiradi Vati and Brahmi Vati, and detoxification procedures like Abhyanga and Swedana.

The results demonstrated a significant reduction in tobacco consumption, improved sleep quality, and better concentration. Ayurvedic therapies also alleviated withdrawal symptoms such as anxiety, agitation, and cravings. Yoga and meditation enhanced mental clarity and emotional balance, supporting long-term recovery. This study highlights Ayurveda's potential as a comprehensive treatment strategy, addressing addiction's physical, mental, and emotional dimensions for sustainable results.

Keywords: Tobacco, Addiction, Khadiradi Vati, Dashansanskar, FTND.

#### Introduction

Tobacco use is a major risk factor for many chronic diseases, including cancer, lung disease, cardiovascular disease and stroke. It is one of the major causes of death and disease in India and accounts for nearly 1.35 million deaths every year. India is also the second largest consumer and producer of tobacco. A variety of tobacco products are available at very low prices in the country.

Nearly 267 million adults (15 years and above) in India (29% of all adults) are users of tobacco, according to the Global Adult Tobacco Survey India, 2016-17. The most prevalent form of tobacco use in India is smokeless tobacco and commonly used products are *Khaini*, *Gutkha*, Betel quid with tobacco and *Zarda*. Smoking forms of tobacco used are bidi, cigarette and hookah.

Globally, tobacco use is one of the biggest public health threats. It leads not only to loss of lives but also has heavy social and economic costs. The total economic costs attributed to tobacco use from all diseases in India in the year 2017-18 for persons aged 35 years and above amounted to INR 177 341 crore (USD 27.5 billion).

The nicotine in any tobacco product readily absorbs into the blood when a person uses it.

Upon entering the blood, nicotine immediately stimulates the adrenal glands to release the hormone epinephrine (adrenaline). Epinephrine stimulates the central nervous

system and increases blood pressure, breathing, and heart rate. As with drugs such as cocaine and heroin, nicotine activates the brain's reward circuits and also increases levels of the chemical messenger dopamine, which reinforces rewarding behaviors. Studies suggest that other chemicals in tobacco smoke, such as acetaldehyde, may enhance nicotine's effects on the brain.

Tobacco is a *Sthavara*, *Patra Visha* but it is not explained in Samhita Kala. It was introduced in *Nighantu* Kala by *Acharya Yogratnakara*. He explained Tobacco's therapeutic as well as toxic action in his text. He described that when it is taken in excess amount it produces various hazard effect like intoxication, giddiness, vomiting, Pitta aggravation and purgation, diminishes *Shukra*. 4 It's *Tikshna* and *Pittavardhaka* properties are responsible for *Mukhapaak* (*Sarvsar Roga*) which are identified with mouth ulcer, redness and erosion of buccal mucosa, burning sensation of oral mucosa.

### **Case Study**

This is a case of 20 years old man, he was asymptomatic before 3 years then he started taking bidi and gutka initially he take 2-3 bidi and 1 sachet of gutka then gradually increased to 2-3 bundle of bidi and 5-7 sachet of gutka, he also tried to quit smoking but due to cravings he end up to use it. Then he came to NIA, OPD for further treatment.

### **History of Present Illness**

The patient was presented with loss of appetite, sleepiness, body ache, craving for tobacco. Patient tried to stop tobacco (smoking and gutka) but he complains of lack of concentration, sleepiness, bodyache, loss of appetite, anxiety.

#### **Past Illness**

• No history B.P, Diabetes, Thyroid.

• No history surgery

• History of burn in 2016

• Covid vaccination done

**Nutritional Diet:** Major diet-mixed (veg and non-veg) **Family History:** Father having blood pressure.

#### **Clinical Finding**

**Table 1:** Clinical Finding (Constitution, vitals & systemic examination of the patient).

Examination	Measured value		
Shareerika Prakriti	Vata		
Built	Avar		
Heart rate	64 per min		
Blood pressure	128/80 mm of Hg		
Respiratory System	22 per min		
Cardiovascular System	Normal		
Central Nervous System	Conscious, Orientation Normal		
Per Abdomen Examination	Bowel sound clear		
Urine	4- 6 times		
Stool	1-2 times per day		
Skin, Eyes, Nails	No abnormality detected		
Extermities	No abnormality detected		

All laboratory tests including routine haematology, serology, urinalysis were within normal limits.

Ahara: Non Vegetarian & Vegetarian

Kostha: Madhyam, Aharvidhi: Vismashan, Nidra: Alapnindra

Pramana: (Dasvidha Pariksha) Prakruti: Vata-pitta,

Sara: Madhaym,

Sanhanan: Madhaym, Pramana: Madhaym,

Satmya: Sarvrasa, Satwa: Madhaym, Ahara shakti: Aavar, Vyayma: Madhaym, Vaya: Yuvaavastha, Desha: Jangham

Astvidh Pariksha: Nadi (Pulse): 78/min,

Mootra (urine): Pittabh varna,

Mala (bowel): Vibandha, Jihwa (tongue): Malaavrata,

Shabda (speech): Samanya,

Sparsha: Samanya, Drukh: Samanya Aakruti: Poor built

#### **Avurvedic Treatment**

- i). Awareness and counseling.
- ii). Medications.
- iii). Panchakarma
- iv). Yoga and Meditation
- 1. Awareness and Counseling: Awareness about the harmful effects of Nicotine among the masses is an important part of preventing people from getting addicted to nicotine abuse.

Counseling is an addiction treatment, its goal is to help one let go of emotions like rage, humiliation, low selfesteem, remorse, jealousy etc.

#### 2. Medications

- Khadiradi Vati 2-2-2
- Dashansanskar Churan 3 gm oral for Manjanrath 5 times day
- Saunth + Ajwain + Mishri + Saunf mixture 5 times a day
- Brahmi Vati
- 3. Panchkarma: Panchkarma is helpful in providing fast relief by eliminating the excess dosha (detoxification). It includes (Vaman, Virechan, Basti, Nasya, Raktmokshan). Before performing the above procedures, Abhyanga (oleation), Swedana (sudation), and Karma (procedure), also known as Purva karma (preliminary measures), are performed. Among the above procedures, Abhyanga (oil massage), Swedana (sudation), Shirodhara, and Vasti also play a very vital role in treating patients with tobacco addiction.

Abhyanga and Swedana for 30-40 mins it relieves patient anxiety, calms the nerves, benefits of sleep, effective in stress relief, improves circulation/reduces inflammation.

4. Yoga and Meditation: Kapal Bhati Pranayama (Nadi Shodhan Pranayama (Alternate nostril breathing technique) Bhujangasana (Cobra pose) Shishuasana (Child pose) Trikonasana (Triangle pose) Shavasana (Corpse pose)

## Result & Discussion

According to Ayurveda, any Dravya (medicine) if taken in proper amount they act as a nectar otherwise poison. Adoption of Ayurveda principles with Padanshik (reduced tapering quantity) may help by keeping away agitation, anxiety, irritability, anger, and so on, to facilitate good conduct in daily life along with counselling, entertainment, and music. The patient demonstrated a notable decrease in daily cigarette consumption. The FTND score showed a substantial decrease, reflecting lower nicotine dependence. Furthermore, the patient noted an enhancement in sleep quality and improved concentration throughout the treatment. There were no observed adverse events or side effects, indicating good tolerance of the Ayurvedic herbo-mineral mixture by the patient.

**Assessment Criteria:** Clinical Assessment of Patient will be done on the basis of given sign & symptoms by FTND (Fagerstrom Test for Nicotine Dependence) on 0, 14, 30 days.

Table 2: Fagerstrom Test for Nicotine Dependence (FTND) Score of the patient during the study.

Question		14th day	30th day
How soon after you wake up do you smoke your first cigarette?		1	1
Do you find it difficult to refrain from smoking in places where it is forbidden?		0	0
Which cigarette would you hate most to give up?		1	0
How many cigarettes per day do you smoke?		1	0
Do you smoke more frequently during the first hours after waking than during the rest of the day?		1	0
Do you smoke when you are so ill that you are in bed most of the day?		0	0
Total Score		4	1
		Moderate	Low
		dependency	dependence

This case report emphasizes the potential of Ayurvedic medicine, specifically its role in enhancing "Manas Satva Guna" [mental clarity and balance] and alleviating stress, as a holistic strategy for smoking cessation that may assist in managing nicotine withdrawal.

Panchkarma therapy purifies the body by eliminating accumulated toxins. Counseling and awareness also play a vital role in recovery from nicotine addiction. Various yoga postures, along with meditation, not only enhance physical strength but also help address issues such as anxiety, depression, and personality disorders. A comprehensive review of Ayurvedic treatment parameters suggests that a combination of Ayurvedic formulations, Panchakarma procedures, yoga asanas, pranayama, meditation, and counseling can effectively treat nicotine addiction. The primary focus of this treatment protocol was to enhance the Satvik guna.

The choosen herbo-mineral mixture was thoughtfully formulated to achieve this goal.

- i). *Khadiradi Vati*: Act as oral antiseptic, anti-inflammatory, astringent and expectorant.
- **ii).** *Dashansanskar Churan*: Anti-inflammatory properties that aid in reducing gum swelling and bacterial infections, anti-allergic, anti-microbial, analgesic.
- iii). Saunth + Ajwain + Mishri + Saunf: Antimicrobial, antioxidant properties, anti-inflammatory. Mishri is recognized for its ability to alleviate fatigue and enhance mental well-being.
- **iv).** *Brahmi Vati*: Anti-inflammatory properties, help the immune system, anti-asthmatic property, antioxidants.

#### Conclusion

This case study highlights the effectiveness of Ayurvedic medicine as a comprehensive approach to managing tobacco addiction. The combination of awareness and counseling, alongside tailored Ayurvedic treatments such as specific herbo-mineral formulations and Panchakarma therapies, demonstrates significant potential in alleviating nicotine dependence and its associated symptoms. The patient experienced a notable reduction in tobacco consumption, improved sleep quality, and enhanced concentration, underscoring the holistic benefits of Ayurveda.

Furthermore, the integration of yoga and meditation practices contributed to improved mental clarity and emotional stability, reinforcing the principles of Ayurveda in promoting overall well-being. This case emphasizes the importance of addressing not just the physical aspects of addiction but also the mental and emotional dimensions, facilitating a more sustainable recovery process.

#### References

- 1. WHO. https://cdn.who.int/media/docs/default-source/searo/india/health-topic-pdf/tobacco/gats-india-2016-17-factsheet.pdf?sfvrsn=27b93d0e 2
- A review of vishaghna dravyas useful in tobacco deaddiction. https://iamj.in/posts/2022/images/upload/1929\_1934\_1.p
- 3. A review on tobacco addiction and its management: An ayurvedic approach. https://ijrap.net/admin/php/uploads/2664 pdf.pdf
- 4. Management of addiction of tobacco through ayurveda-a formative evaluation STUDY. https://ijapr.in/index.php/ijapr/article/download/2879/224 5/
- 5. Panchakarma Perception-An Overview https://jaims.in/jaims/article/download/8/9/
- 6. Das, Kishore; Kumawat, Dinesh Kumar; Sharma, Anita; Pandey, Narayan. The role of Ayurveda in management of nicotine addiction-Critical review. *Journal of Indian System of Medicine*. 2023; 11(3):169-175. | DOI: 10.4103/jism.jism 82 22
- 7. Effect of ayurvedic management in tobacco addiction-a single case study Noori Aara, Parmanand Upadhyay, Sunita Godara, Mohd. Adil Ansari, P.G. Dept, Agad Tantra Evam Vyavahar Ayurveda, DSRRAU, Jodhpur, Rajasthan, India https://www.iamj.in/posts/images/upload/312 317.pdf
- 8. An Ayurvedic Medicine Protocol In The Management Of Smoking Addiction: A Case Report Dr. Sudharma S. Rankhamb\*, Dr. Vidya C. Undale, Dr. Payal P. Wavhal 1PG Scholar, Department of Agadatantra evum Vidhivaidyak, Sumatibai Shah Ayurved Mahavdiyalaya, Hadapsar, Pune, India, Dr. D.Y. Patil College of Ayurved & Research Centre, Pimpri, Pune, India.
- 9. FTND Fagerstrom test for Nicotine Dependence https://cde.nida.nih.gov/instrument/d7c0b0f5-b865-e4de-e040-bb89ad43202b.