

Case Report

Role of Ayurveda in the management of *Apasmara*: A case study

Gaurav Sawarkar, Punam Sawarkar¹

Departments of Rachana Sharir and ¹Panchkarma, Mahatma Gandhi Ayurved College, Hospital and Research Centre, Datta Meghe Institute of Medical Sciences (DU), Wardha, Maharashtra, India

Abstract

Apasmara (epilepsy) is defined by Acharya Charaka as *Apagama* (deterioration) of *Smriti* (retention) associated with *Bibhatsa Chesta* (seizures) due to derangement of *Dhi* and *Sattva*. The vitiate *Dosha* related to the condition are *Vata* and *Rajo Dosha*. The main features of *Apasmara* are impairment in memory or awareness. Even though most of the times, it is considered as *Manasroga* (psychic disorders), it is not a *Manasroga*. *Apasmara* is one of the diseases, which affects both *Sharira* (physical) and *Manas* (mental). A 52-year-old man approached the OPD of Panchakarma department with the impairment of memory in the last 2 years. Earlier he had taken allopathic medicine but he discontinued the medicine due to no significant relief from the adverse effects of the medicines. He was advised with *Yoga Basti* (enema), *Shirodhara* (Pouring of medicated oil over head from a distant height), and *Nasya* (errhine therapy) along with palliative treatment. After 1-month treatment and follow-up, it was observed that the patient was satisfied with treatment and changes in the complaints with improved quality of life. Palliative treatment was advised to the patient for additional.

Keywords: *Apasmara*, epilepsy, meditation, *Panchakarma*, *Yoga*

INTRODUCTION

Acharya Charaka described *Apasmara* (epilepsy) as *Apagama* (loss of) of *Smriti* (memory) associated with *Bibhatsa Chesta* (irrelevant behavior) due to derangement of *Dhi* (thinking capacity) and *Sattva* (mental strength).^[1] *Apasmara* is described in Madhava Nidana as the loss of *Smriti*, characterized by *Tamaha Pravesha* (feeling of aura), which occurs spontaneously.^[2] The word “*Apasmara*” indicates only a clinical sign and not a supernatural cause. *Smara* means memory. It includes memory, intelligence, and consciousness. *Apa* means loss. Loss of consciousness is one of the important signs.^[3] The clinical features of *Apasmara* can be correlated with epilepsy in modern medicine. The disease epilepsy is featured about disturbed normal pattern of neural activity, which causes strange sensations, occasional convulsions, muscle spasms, and loss of consciousness.^[4] The intention of this case report was to present the constructive approach toward Ayurveda treatment in *Apasmara* without any unwanted incidences and side effects.

PATIENT INFORMATION

A 52-year-old man was symptomless before 2 years, gradually emerging symptoms likewise mental irritation, disturbed sleep, impairment in *Dhi* (intellectual), *Dhriti* (grasping), and *Smriti* (memory). The patient was unable to recall the events, which was once in 2 months. Then he consulted neurophysician, and he was started on antiepileptic drugs. After regular antiepileptic medication, the patient had no attack of seizure, but he was having a feeling of irritation, depression, lack of interest in surrounding, isolation, and feeling of lethargy.

CLINICAL FINDINGS

The patient had epileptic convulsions involving recurrent state of unconsciousness, seizures, sweating, memory impairment, and lock jaw during attack, which were bimonthly once. The last convulsive episode was 3 months ago. There was no

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Address for correspondence: Dr. Gaurav Sawarkar,
Department of Rachana Sharir, Mahatma Gandhi Ayurved College,
Hospital and Research Centre, Datta Meghe Institute of
Medical Sciences (DU), Salod (Hirapur),
Wardha 442001, Maharashtra, India.
E-mail: drsawarkar.gaurav@gmail.com

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history of diabetes and hypertension; no significant family history and personal history were observed.

General Examination

Alert with normal sensorium

Vital signs: HR–68/min, RR–18/min, and BP–130/80 mm Hg

Central Nervous System Examination

1. Appearance: Alert, active
2. Behavior: Cooperative well mannered
3. Hallucination: No hallucinations during seizure episodes
4. Intelligence: Normal
5. Consciousness: Normal
6. Memory: Normal
7. Orientation: Normal
8. Speech: Normal

All cranial nerves: Intact

Motor system: Not any deformity

Sensory system: Not any deformity

Cerebellar signs: Nil

Signs of meningeal irritation: Nil

Ashtavidhpariksha

Nadi: 68/min

Mala: *Saama*, *grathit*, and irregular

Mutra: *Samyak*

Jivha: *Saam*

Shabda: *Spashta*

Sparsh: *Anushanashita*

Druk: *Prakrut*

Aakruti: *Krusha*

DIAGNOSTIC ASSESSMENT

Assessment Criteria

For subjective assessment,^[5] the following symptoms were kept as parameter [Table 1].

1. Severity of attack
 - a. Grade 0: Myoclonic tremors
 - b. Grade 1: Multi focal clonic tremors
 - c. Grade 2: Generalized tonic tremors
 - d. Grade 3: Frothing + tongue biting

2. Frequency of convulsion
 - a. Grade 0: No convulsion
 - b. Grade 1: 1 episode/15 days
 - c. Grade 2: 1 episode/7 days
 - d. Grade 3: 1 or more episodes/day
3. Duration of convulsion attack
 - a. Grade 0: No convulsion
 - b. Grade 1: 5–15 s
 - c. Grade 2: 15–30 s
 - d. Grade 3: >30 s
4. Ictal features
 - a. Grade 0: No any features
 - b. Grade 1: Headache
 - c. Grade 2: Headache + drowsiness/delirium
 - d. Grade 3: Paresis + other complaints

Therapeutic Intervention

Therapeutic interventions are shown in Tables 2–5.

Follow-up and Outcomes

Follow-up and outcomes are shown in Table 5.

DISCUSSION

In this case study, the patient got relief from symptoms of *Apasmara* with the help of *Panchakarma*, *Shamana* (palliative) treatment with *Yoga*, *Pranayama*, and *Asana*. The previously taken antiepileptic drugs medication has many drawbacks such as adverse reaction and drug interaction. Cognitive impairment to an extent is also seen in patients with epilepsy. *Panchakarma* and internal Ayurveda medicines work surprisingly in this area, and they do a remarkable job. *Dhanwantara Taila Abhyanga*—cures *Kampa* (tremors), *Akshepa* (convulsions), *Unmada* (insanity), and all types of *Vataja Rogas* (neurological disorders).^[7] *Shirodhara* makes satiety in head, removes facial wrinkles, *Santarpana* of *Indriya* (nourishes all sense organs), and does the *Pratipurana* of *Shiras* and acts as *Nidra Labha Sukha* (gets good sleep easily and feels happy).^[8,9] Body massage with simple or medicated oil increases the blood amino acids such as tryptophan, simultaneously reduces the stress, and stimulates nervous system, ultimately, which acts on muscular system that governed particular nerve actions.^[10]

Nasya with *Panchagavya Ghrita* showed an anticonvulsant effect against maximal electroshock seizure in animal

Table 1: MMSE scale for retention of knowledge examination^[6]

Measure	Attention	Language functions	Recall	Orientation	Visual-spatial abilities
MMSE 30 Points	Subtraction of 7s from 100 (5)	(Naming objects (3), repetition (1), command (3), comprehension (1), reading (1), and writing sentence (1))	Previously memorized words (3)	For time and place (10)	Praxis—copying a picture of two overlapping pentagons (2)
Total	5	10	3	10	2

MMSE = mini mental state examination

Table 2: Phase I: *Panchakarma* treatment plan

Sr. no.	Name of treatment	Drugs used	Dose	Duration of treatment
1	<i>Sarwanga Abhyanga</i> (full body massage)	<i>Dhanwantara Taila</i>	-	15 days
2	<i>Petisweda</i> (sudation)	<i>Dashmool Kwath</i>	-	15 days
3	<i>Shirodhara</i>	<i>Tila Taila</i> + <i>Bramhi Taila</i>	-	10 days
4	<i>Nasya (marsha)</i>	<i>Panchagavya Ghrita</i>	8 drops in each nostril	10 days
5	<i>Yoga Basti</i>	<i>Dhanvatar Taila</i>	120 mL	15 days
	<i>Anuvasana</i>	<i>Dashmool Kwath</i> ,	650 mL	
	<i>Niruha</i>			

Table 3: Phase II: Palliative treatment plan

Sr. no.	Drug/formulation	Dose	Anupana	Time of administration
1	<i>Tab Bramhi Vati</i>	Two tablets twice a day	<i>Koshnajala</i>	Morning and evening
2	<i>Manasmitra Vatakam</i>	One tablet once a day	<i>Go-Ghrita</i> + <i>Sharkara</i>	Morning and evening
3	<i>Saraswatarishta</i>	15 mL twice a day	<i>Koshnajala</i>	After each meal
4	<i>Panchagavya Ghrita</i>	15 mL twice a day	<i>Koshnajala</i>	Early morning

Table 4: Plan for pranayama, yoga, and meditation

Sr. no.	Name of treatment	Duration	Duration of treatment
1	<i>Pranayama</i>	10 min	15 days
2	<i>Asanas</i>	15 min	15 days
3	Meditation	15 min	15 days

Table 5: Effect of treatment on symptoms of epilepsy

Sr. no.	Assessment criteria	BT	AT 15th day F/U	AT 30th day F/U	AT 45th day F/U	AT 60th day F/U
1	Severity of attack	3	2	1	0	-
2	Frequency of convulsion	1	0	0	0	0
3	Duration of convulsion	2	1	1	0	0
4	Ictal features	2	2	0	0	0

BT = before treatment, AT = after treatment, F/U = follow-up

model, which induced seizures and also potentiated the anticonvulsant effect.^[11] It also controls the regular occurrence of convulsions and the extent of duration and it does not have any side effect; hence, it can be prescribed for a long time in therapeutic dosage.^[12]

Yoga Basti is characterized for curative, preventive, and promotive action. It pacifies the vitiated *Vata Dosha* in *Apasmara* and gives results in repetitive attacks. *Basti* is considered as a wide-ranging key treatment modality for *Vata Dosha*.^[13]

Bramhi Vati, in which *Brahmi* being a *Medhya* (brain tonic) drug is recommended for various psychosomatic and psychiatric disorders. It has capacity to cross the blood-brain barrier with the help of cow ghee as a vehicle. *Brahmi Ghrita* is recommended for the management of *Unmada* (insanity), *Alakshmi* (inauspicious), *Apasmara* (epilepsy), *Papavikaras* (diseases due to sinful acts),^[14] and for *Apasmara*, *Unmada*, and *Graha Rogas* (diseases afflicted by evil spirits).^[15] *Saraswatarishta* improves general well-being and mental health. It increases

immunity, memory, voice quality, feelings of joy, and satisfaction as well.^[16]

Mini Mental State Examination (MMSE), the most commonly used measure of the global mental status, is used in the screening for dementia.^[17]

Pranayama or deep diaphragmatic breathing exercise reported changes in metabolism, blood flow, and oxygen levels in the blood. The regular practice of pranayama, in which person doing controlled deep diaphragmatic breathing exercise facilitated with reinstate normal respiration; this can reduce the duration of seizure and/or stop the seizure before it becomes full blown.^[18]

Asanas or *Yogasanas* postures aid in reestablishing equilibrium of the body and its metabolic systems. Practicing regular *Asanas* strengthens person physically and calms the nervous functions. *Asanas* can be used as a physical exercise alone, which helps to improve circulation, respiration, and concentration, whereas declining the probabilities of seizure.^[19]

Dhyana (meditation) is a soothing experience that relaxes the mind and heals the body. Meditation corrects the

blood flow to the brain and slows down the production of stress hormones. Simultaneously, meditation increases the levels of neurotransmitters, which keep the nervous system calm. Relaxation techniques, such as yoga and meditation, are well-known effective remedies in seizure control.^[20]

The patient got symptomatic result in this scenario, nevertheless evidences such as electroencephalogram and magnetic resonance imaging were not carried out because of financial condition of the patient. So, by conducting clinical trials, one can fix the treatment protocol for *Apasmara* and facilitate the society with harmless productive treatment.

CONCLUSION

Panchakarma treatment, such as *Shirodhara*, *Nasya*, and *Basti* along with palliative treatment (*Shaman Chikitsa*), are safe without any interactions and adverse effects in the treatment in *Apasmara*. Now, the patient is symptomless and feels relaxed. But he is still on the clinical follow-up. This type of treatment plan can be recommended for large sample size as randomized clinical trial.

Patient Perspective

The patient was satisfied as he had improved, without any side effect, he felt relaxed, and his enthusiasm improved.

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Conflicts of interest

There are no conflicts of interest.

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