

A review article on Treatment of Apasmara according to Charaka Samhita w.s.r. to epilepsy

Description

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Abstract

Apasmara, as described in the ancient Ayurvedic text *Charaka Samhita*, refers to a condition characterized by sudden loss of consciousness accompanied by convulsions, aberrant movements, and memory loss. This condition closely resembles epilepsy in modern medical science. Acharya Charaka provides a comprehensive understanding of Apasmara, including its etiology, pathogenesis, classification, clinical features, prognosis, and therapeutic approaches. This article explores the Ayurvedic concept of Apasmara as presented by Charaka, correlating it with contemporary medical knowledge on epilepsy. By integrating traditional insights with modern science, we aim to enhance the understanding of neurological disorders and promote holistic management strategies.

Introduction

Neurological disorders, particularly epilepsy, pose significant health challenges worldwide, affecting individuals of all ages. Epilepsy is a chronic disorder characterized by recurrent, unprovoked seizures resulting from abnormal electrical activity in the brain. Despite advancements in medical science, epilepsy continues to have a considerable impact on the quality of life of those affected.

In Ayurveda, the ancient Indian system of medicine, epilepsy is referred to as *Apasmara*. Derived from the Sanskrit roots “Apa” (loss) and “Smara” (memory), Apasmara denotes a loss of consciousness and memory due to deranged mental functions. Acharya Charaka, one of the principal exponents of Ayurveda, provides an elaborate exposition on Apasmara in the *Chikitsa Sthana* (treatment section) of the *Charaka Samhita*.

This article delves into the Ayurvedic understanding of Apasmara as described by Charaka, correlating it with modern concepts of epilepsy. By examining the etiopathogenesis, classification, clinical features, and treatment modalities, we seek to bridge the ancient wisdom of Ayurveda with contemporary medical science. Such integration can offer valuable insights for holistic management and improved patient outcomes.

Etiology (Nidana) of Apasmara

Ayurvedic Perspective

Acharya Charaka emphasizes that Apasmara arises due to the vitiation of all three doshas—*Vata*, *Pitta*, and *Kapha*—along with the involvement of psychological factors. The primary etiological factors include:

1. Dietary Factors

- **Consumption of Unwholesome Food (Ahita Ahara):**
 - Ingestion of incompatible foods (*Viruddha Ahara*).
 - Eating unclean or contaminated food (*Ashuchi Bhojana*).
 - Overeating or irregular eating habits.

Shloka Reference:

- “*Vibhranta-bahu-dosham ahitashuchi-bhojanat* |” (Verse 4)
 - “Due to the consumption of unwholesome and unclean food, the doshas become aggravated.”

2. Lifestyle Factors

- **Suppression of Natural Urges (Vegas):**
 - Voluntarily withholding natural urges like urination, defecation, sneezing, etc.
- **Excessive Physical or Mental Strain:**
 - Overexertion, stress, and fatigue.
- **Improper Sleep Patterns:**
 - Excessive sleep (daytime sleeping) or insomnia.

3. Psychological Factors

- **Emotional Disturbances:**
 - Excessive thinking (*Chinta*).
 - Unfulfilled desires (*Kama*).
 - Fear (*Bhaya*).
 - Anger (*Krodha*).
 - Grief (*Shoka*).
 - Anxiety (*Udvega*).

Shloka Reference:

- “*Chintakamabhaya-krodha-oka-udvega-dibhi tath | Manasy abhibhigate nam apasmara pravartate ||*” (Verse 5)
 - “When the mind is afflicted by factors like excessive thinking, desire, fear, anger, grief, and

anxiety, Apasmara manifests.”

4. Pathogenesis (Samprapti)

- The vitiated doshas accumulate and obstruct the channels of the mind (*Manovaha Srotas*) and heart (*Hridaya*), considered the seat of consciousness and memory.
- The obstructed doshas disturb the normal functioning of the mind, leading to loss of memory and consciousness.

Shloka Reference:

- “*Dhaman?bhi? ?rit? do?? h?daya? p??ayanti hi | Samp??yam?no vyathate m??ho bhr?ntena cetas? ||*” (Verse 6)
 - “The doshas residing in the channels press upon the heart; the afflicted individual becomes distressed and loses consciousness due to the disturbed mind.”

Modern Correlation

The etiological factors of Apasmara share similarities with the risk factors for epilepsy:

1. Genetic Predisposition

- Family history of epilepsy increases susceptibility.

2. Neurological Factors

- Structural brain abnormalities.
- Previous brain injuries or infections.

3. Metabolic Factors

- Electrolyte imbalances.
- Hypoglycemia or hyperglycemia.

4. Psychological Stress

- Emotional disturbances and stress can trigger seizures in susceptible individuals.

5. Lifestyle Factors

- Sleep deprivation.
- Substance abuse (alcohol, drugs).
- Exposure to flashing lights (in photosensitive epilepsy).

Classification of Apasmara

Ayurvedic Perspective

Charaka classifies Apasmara into four types based on the predominant dosha:

1. **Vataja Apasmara:** Caused by vitiated Vata dosha.
2. **Pittaja Apasmara:** Caused by vitiated Pitta dosha.
3. **Kaphaja Apasmara:** Caused by vitiated Kapha dosha.
4. **Sannipataja Apasmara:** Caused by simultaneous vitiation of all three doshas.

Shloka Reference:

- “P?thag do?ai? samastai? ca vak?yate sa caturvidha? ||” (Verse 8)
 - “It is of four types, caused individually by each dosha and by all doshas combined.”

Clinical Features Based on Dosha Predominance

1. Vataja Apasmara

- **Symptoms:**
 - Tremors (*Kampa*).
 - Clenching of teeth (*Prada?ed dant?n*).
 - Frothing at the mouth with thin, clear froth.
 - Rapid breathing (*?vasiti*).
 - Seeing frightening visions of dark or red colors.
- **Shloka Reference:**
 - “*Kampate prada?ed dant?n phenodv?m? ?vasity api | Paru??ru?a-k????ni pa?yed r?p??i c?nil?t ||*” (Verse 9)

2. Pittaja Apasmara

- **Symptoms:**
 - Yellowish froth from the mouth and eyes.
 - Excessive thirst (*T????a*).
 - Feeling of heat in the body.
 - Seeing visions of fire, light, and yellow or red colors.
- **Shloka Reference:**
 - “*P?ta-phen??ga-vaktr?k?a? p?t?s?g-r?pa-dar?ana? | Sa-t????o???nala-vy?pta-loka-dar?? ca paittika? ||*” (Verse 10)

3. Kaphaja Apasmara

- **Symptoms**

:

- Whitish froth from the mouth and eyes.
- Coldness of the body.
- Heaviness and stiffness in the limbs.
- Slow recovery from the episode.
- Seeing white-colored visions.

• **Shloka Reference:**

- “*ukla-phen-ga-vaktr-k-a? to h-gajo guru? | Pa-yañ uk-?ni r-p-i ?lai-miko mucyate cir-t ||*” (Verse 11)

4. Sannipataja Apasmara

• **Symptoms:**

- Combination of symptoms from all three doshas.

• **Prognosis:**

- Considered incurable due to the severe vitiation of all doshas.

• **Shloka Reference:**

- “*Sarvair etai? samastai? ca li-gair jñeya? trido-aja? | Apasm-ra? sa c-s-dhyo ya? k-asy-nava? ca ya? ||*” (Verse 12)

Modern Correlation

The Ayurvedic classification corresponds with various types of seizures and epilepsy:

1. Generalized Tonic-Clonic Seizures

- Resemble Vataja Apasmara with convulsions, loss of consciousness, and muscle rigidity.

2. Focal Seizures with Impaired Awareness

- May correlate with Pittaja or Kaphaja Apasmara, depending on symptoms like altered sensations, visual disturbances, and autonomic changes.

3. Status Epilepticus

- A severe form corresponding to Sannipataja Apasmara, which is difficult to treat and can be life-threatening.

Clinical Features (Lakshana) of Apasmara

Ayurvedic Perspective

General Symptoms

- **Loss of Memory and Consciousness:** Sudden onset of unconsciousness with memory loss.
- **Disturbance of Mind and Senses:** Impaired mental functions and sensory perceptions.
- **Involuntary Movements:** Abnormal and uncoordinated body movements.

Shloka Reference:

- “*Sm?ter apagama? pr?hur apasm?ra? bhi?ag-vida? | Tama?-prave?a? b?bhatsa-ce??a? dh?-sattva-samplav?t ||*” (Verse 3)
 - “Experts describe Apasmara as loss of memory, entry into darkness (unconsciousness), and dreadful movements due to derangement of intellect and mind.”

Specific Symptoms Based on Dosha

1. **Vataja Apasmara:**
 - Tremors, frothing at the mouth, rapid breathing.
 - Seeing frightening visions.
 - Clenching of teeth.
2. **Pittaja Apasmara:**
 - Yellowish discoloration of froth, eyes, and skin.
 - Excessive thirst, feeling of heat.
 - Seeing bright or fiery visions.
3. **Kaphaja Apasmara:**
 - Whitish froth, coldness, heaviness.
 - Prolonged unconsciousness.
 - Seeing white visions.
4. **Sannipataja Apasmara:**
 - Combination of all symptoms.
 - Severe and often leads to complications.

Episode Frequency

- The frequency of episodes may vary:
 - **Vataja:** Frequent episodes.
 - **Pittaja:** Moderate frequency.
 - **Kaphaja:** Less frequent but prolonged episodes.

Shloka Reference:

- “*Pak??d v? dv?da??h?d v? m?s?d v? kupit? mal?? | Apasm?r?ya kurvanti vega? kiñcid ath?ntaram ||*” (Verse 13)
 - “The aggravated doshas cause episodes of Apasmara at intervals of fortnightly, twelve days, or monthly, with slight variations.”

Modern Correlation

The clinical features of Apasmara correspond closely with epilepsy:

Generalized Seizures

- **Tonic-Clonic Seizures:**
 - Sudden loss of consciousness.
 - Convulsions with muscle stiffness and jerking movements.
 - Frothing at the mouth.
 - Possible biting of the tongue.

Aura and Visual Disturbances

- **Sensory Hallucinations:**
 - Visual auras, seeing lights or colors before a seizure.
- **Autonomic Symptoms:**
 - Changes in heart rate, sweating, and temperature sensation.

Postictal State

- **Recovery Phase:**
 - Confusion, fatigue, and drowsiness after the seizure.
 - Gradual return of consciousness.
-

Pathogenesis (Samprapti) of Apasmara

Ayurvedic Perspective

- **Dosha Vitiation:** The etiological factors lead to the aggravation of doshas.
- **Obstruction of Channels:** The vitiated doshas obstruct the channels of the mind and heart (*Manovaha Srotas* and *Hridaya*).
- **Disturbance of Consciousness:** This obstruction leads to derangement of the mind, intellect, and memory.
- **Manifestation of Symptoms:** The disturbed doshas cause characteristic symptoms during episodes.

Shloka References:

- “Dhaman?bhi? ?rit? do?? h?daya? p??ayanti hi | Samp??yam?no vyathate m??ho bhr?ntena cetasa? ||” (Verse 6)
- “Tair ?v?t?n?? h?t-srotas manas?? samprabodhanam | T?k??air ?dau bhi?ak kury?t karmabhir vaman?dibhi? ||” (Verse 14)

Modern Correlation

- **Abnormal Electrical Activity:** Seizures occur due to sudden, excessive electrical discharges in brain neurons.
- **Neuronal Hyperexcitability:** Imbalance between excitatory and inhibitory neurotransmitters.
- **Structural or Functional Abnormalities:** Lesions, scar tissue, or genetic mutations affecting brain function.

Prognosis (Sadhya-Asadhya) of Apasmara

Ayurvedic Perspective

- **Curable (Sadhya):**
 - Apasmara caused by single dosha involvement (Vata, Pitta, or Kapha) and in strong individuals.
- **Incurable (Asadhya):**
 - Sannipataja Apasmara (involvement of all three doshas).
 - Cases in emaciated or weak individuals.
- **Factors Affecting Prognosis:**
 - Duration and frequency of episodes.
 - Response to treatment.
 - Presence of complications.

Shloka Reference:

- “Apasm?ra? sa c?s?dhyo ya? k???asya anava? ca ya? ||” (Verse 12)

Modern Correlation

- **Good Prognosis:**
 - Seizures controlled with medication.
 - Normal neurological examination.
- **Poor Prognosis:**
 - Refractory epilepsy (not responding to treatment).
 - Associated neurological deficits.
 - High frequency of seizures.

Treatment Principles (Chikitsa Sutra)

Ayurvedic Perspective

General Approach

1. Purification Therapies (Shodhana Chikitsa):

- **Emesis (Vamana):** For Kaphaja Apasmara.
- **Purgation (Virechana):** For Pittaja Apasmara.
- **Enema (Basti):** For Vataja Apasmara.
- **Goal:** Eliminate vitiated doshas from the body.

Shloka Reference:

- “*V?tika? basti-bh?yi??hai? paitta? pr?yo virecanai? | ?lai?mika? vamana-pr?yair apasm?ram up?caret ||*” (Verse 15)

2. Pacification Therapies (Shamana Chikitsa):

- Use of herbal formulations, medicated ghee (*Ghrita*), and oils (*Taila*).
- Administration of nasal medications (*Nasya*), collyrium (*Anjana*), and inhalation therapies (*Dhuma*).

3. Strengthening the Mind and Heart:

- Use of rejuvenating herbs (*Rasayana*) to improve intellect and memory.
- Dietary and lifestyle modifications to support mental health.

Specific Treatments Based on Dosha

1. Vataja Apasmara:

- **Therapies:**
 - Oil enemas (*Anuvasana Basti*).
 - Herbal formulations with Vata-pacifying herbs.
- **Diet:**
 - Warm, unctuous foods.
 - Avoidance of cold, dry foods.

2. Pittaja Apasmara:

- **Therapies:**
 - Purgation with cooling purgatives.
 - Use of herbs that pacify Pitta.
- **Diet:**
 - Cooling, sweet foods.
 - Avoidance of spicy, sour, and hot foods.

3. Kaphaja Apasmara:

- **Therapies:**
 - Induced vomiting (*Vamana*).

- Use of strong nasal medications and collyrium.
- **Diet:**
 - Light, warm foods.
 - Avoidance of heavy, oily foods.
- 4. **Sannipataja Apasmara:**
 - **Therapies:**
 - Combination of treatments targeting all three doshas.
 - **Prognosis:**
 - Difficult to treat; focus on palliative care.

Herbal Formulations

1. **Panchagavya Ghrita:**
 - **Ingredients:** Cow's ghee, milk, curd, urine, dung juice, along with specific herbs.
 - **Benefits:**
 - Effective in Apasmara, Kamala (jaundice), and fever.
 - **Shloka Reference:**
 - “Go-?ak?d-rasa-dad-?m?la-k??ra-m?tra? samair gh?tam | Siddha? pibed apasm?ra-k?mal?-jvara-n??anam ||” (Verse 17)
2. **Mahapanchagavya Ghrita:**
 - An enhanced version with additional herbs for severe cases.
3. **Other Medicated Ghritas:**
 - Preparations with herbs like *Brahmi* (Bacopa monnieri), *Vacha* (Acorus calamus), *Shankhapushpi* (Convolvulus pluricaulis) to enhance cognitive functions.

External Therapies

- **Abhyanga (Massage):**
 - With medicated oils to pacify doshas.
- **Nasya (Nasal Medication):**
 - Instillation of medicated oils or powders into the nostrils.
- **Anjana (Collyrium):**
 - Application of medicated eye preparations.
- **Dhuma (Inhalation Therapy):**
 - Inhaling medicated smoke for clearing channels.

Shloka Reference:

- “Kapil?n?? gav?? m?tra? n?vana? parama? hitam | ?va-??g?la-bi??l?n?? si?h?d?n?? ca ?asyate ||” (Verse 41)

Modern Correlation

- **Antiepileptic Medications:**
 - Use of drugs like phenytoin, carbamazepine, valproate to control seizures.
- **Ketogenic Diet**

- :
- High-fat, low-carbohydrate diet shown to reduce seizures in some patients.
 - **Surgery:**
 - In cases of refractory epilepsy, surgical interventions may be considered.
 - **Vagus Nerve Stimulation:**
 - Implantation of a device to reduce seizure frequency.

Herbal Formulations and Medications

Ayurvedic Preparations

1. Panchagavya Ghrita

- **Ingredients:**
 - Cow's ghee, milk, curd, urine, dung juice, along with herbs like *Triphala*, *Rajani* (Turmeric), *Katuka* (Picrorhiza kurroa), *Saptaparna* (Alstonia scholaris), *Apamarga* (Achyranthes aspera), etc.
- **Preparation:**
 - The ingredients are cooked together to prepare medicated ghee.
- **Benefits:**
 - Purifies the mind, enhances memory, and is beneficial in Apasmara.

Shloka References:

- “Dvau pañcam?lyau triphal? rajanyau ku?aja-tvacam | Saptapar?am ap?m?rga? n?lin?? ka?urohi??m ||” (Verse 18)
- “Pañcagavyam iti khy?ta? mahad tad am?topamam | Apasm?re tathonm?de ?vayath?-vudare?u ca ||” (Verses 22-23)

2. Brahmi Ghrita

- **Ingredients:**
 - *Brahmi* juice, *Vacha*, *Kustha* (Saussurea lappa), *Shankhapushpi*, and old ghee.
- **Benefits:**
 - Enhances cognitive functions, memory, and is effective in Apasmara and other mental disorders.

Shloka Reference:

- “Br?hm? rasa vac? ku??ha-?a?khapu?p?bhir eva ca | Pur??a? gh?tam unm?d?-lak?my-apasm?ra-p?panut ||” (Verse 25)

3. Medicated Oils

- **Taila Preparations:**
 - Oils infused with herbs for massage and nasal administration.
- **Ingredients:**
 - Herbs like *Vacha*, *Palankasha*, *Kaitarya*, *Hingu*, *Chitraka*, etc.
- **Benefits:**
 - Pacify doshas, clear channels, and alleviate symptoms of Apasmara.

Shloka Reference:

- “*Taila-prastha? gh?ta-prastha? j?van?yai? palonmitai? | K??ra-dro?e pacet siddham apasm?ra-vin??anam ||*” (Verse 28)

4. Nasal Medications (Nasya)

- **Ingredients:**
 - *Kapila* cow’s urine, *Bhringraj* (*Eclipta alba*), *Bargi* (*Clerodendrum serratum*), *Vacha*, etc.
- **Benefits:**
 - Administered nasally to reach the brain directly and alleviate symptoms.

Shloka Reference:

- “*Kapil?n?? gav?? m?tra? n?vana? parama? hitam | ?va-??g?la-bi??l?n?? si?h?d?n?? ca ?asyate ||*” (Verse 41)

Modern Correlation

- **Herbal Supplements:**
 - Use of herbs with neuroprotective properties.
 - *Bacopa monnieri* (Brahmi) has shown potential in enhancing cognitive functions.
- **Aromatherapy and Essential Oils:**
 - Limited evidence but used as complementary therapy for relaxation.
- **Nutraceuticals:**
 - Omega-3 fatty acids and certain vitamins may support neurological health.

Behavioral and Lifestyle Modifications

Ayurvedic Perspective

- **Avoidance of Triggers:**
 - Managing stress, avoiding suppression of natural urges.
- **Dietary Regulations:**
 - Eating wholesome, clean foods.
 - Avoidance of incompatible foods.
- **Mental Well-being**

:

- Practicing meditation, maintaining positive thoughts.
- **Protecting from Hazards:**
 - Ensuring safety during episodes, avoiding dangerous situations.

Shloka Reference:

- “*Jal?gni-druma-?ailebhyo vi?amebhya? ca ta? sad? | Rak?ed unm?dina? caiva sadya? pr??a-har? hi te ||*” (Verse 66)

Modern Correlation

- **Avoidance of Seizure Triggers:**
 - Adequate sleep, stress management.
 - Avoidance of flashing lights for photosensitive epilepsy.
- **Safety Measures:**
 - Supervising activities like swimming, driving.
 - Educating family and friends about seizure first aid.
- **Support Groups and Counseling:**
 - Psychological support to manage the impact of epilepsy on daily life.

Discussion

Acharya Charaka’s detailed description of Apasmara demonstrates a profound understanding of neurological disorders resembling epilepsy. The Ayurvedic approach emphasizes holistic management, addressing physical, mental, and spiritual aspects.

Relevance of Ayurvedic Concepts

- **Dosha Imbalance and Neurological Dysfunction:**
 - The concept of dosha vitiation aligns with modern understanding of neurological imbalances leading to seizures.
- **Mind-Body Connection:**
 - Recognition of the interplay between mental factors and physical symptoms.
- **Individualized Treatment:**
 - Tailoring therapies based on dosha predominance and patient constitution (*Prakriti*).

Integration with Modern Medicine

- **Complementary Therapies:**
 - Incorporating Ayurvedic herbal formulations as adjunct therapy, under medical supervision.
- **Holistic Care:**
 - Emphasizing lifestyle modifications, diet, and mental health along with conventional

treatment.

- **Research Opportunities:**

- Investigating the efficacy of Ayurvedic herbs and formulations in epilepsy through clinical studies.

Challenges and Considerations

- **Scientific Validation:**

- Need for rigorous research to validate traditional treatments.

- **Safety and Efficacy:**

- Ensuring that herbal remedies do not interact adversely with antiepileptic drugs.

- **Cultural Sensitivity:**

- Respecting patient's beliefs and integrating practices that align with their values.

Conclusion

The Ayurvedic understanding of Apasmara, as elucidated by Acharya Charaka, offers valuable insights into the management of epilepsy. The holistic approach addresses the root causes, emphasizes purification, and strengthens the mind and body. Integrating Ayurvedic principles with modern medical practices can enhance patient care by providing comprehensive management strategies.

Further research and collaboration between traditional and modern medical systems are essential to fully harness the potential of Ayurvedic knowledge in treating neurological disorders like epilepsy.

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