

**EPILEPSY IN CHILDREN & IT's AYURVEDIC PROSPECTIVE****Dr. Anchal Kumari\*, Dr. Laxmi<sup>1</sup> and Prof. Mithilesh Verma<sup>2</sup>**

\*PG Scholar, Department of *Kaumarabhritya*, State Ayurvedic College & Hospital, Lucknow, U.P.

<sup>1</sup>Assistant Professor, Department of *Kaumarabhritya*, State Ayurvedic College & Hospital, Lucknow, U.P.

<sup>2</sup>Professor & Head, Department of *Kaumarabhritya*, State Ayurvedic College & Hospital, Lucknow, U.P.

Article Received on  
04 May 2021,

Revised on 25 May 2021,  
Accepted on 15 June 2021

DOI: 10.20959/wjpr20218-20828

**\*Corresponding Author****Dr. Anchal Kumari**

PG Scholar, Department of  
*Kaumarabhritya*, State  
Ayurvedic College &  
Hospital, Lucknow, U.P.

**ABSTRACT**

Epilepsy is a disease which has a lot of importance since ancient time because it affects all the aspects of life of an individual either an adult or it may be a child. It is well known fact that epilepsy affects the child socially, mentally and physically. They faces the challenges, uncertainties, limitations in school, social situations, unemployment, driving and independent living. Though modern science has developed leaps and bounds in treatment of epilepsy but the horror of its occurrence is still among the sufferers as well as among the medical fraternity because of the adverse effect caused by antiepileptic drugs like bone demineralization, growth retardation, disturbance in lipid profile & body weight, imbalance in hormones & other endocrine

functions. Due to these drawback of antiepileptic drugs people shows their faith in ayurvedic drugs for many non-curable diseases. The reason behind this faith is that it works not only on physical disability but also acts spiritually up to mental/intellectual level without any adverse effect.

**KEYWORDS:** *Apasmara*, Epilepsy, Memory, *Ayurveda*.

**MATERIAL AND METHODS**

The material was collected from the classical Ayurvedic Literature, Textbooks & research journals, research studies done in various institutions and modern text.

## INTRODUCTION

It is estimated in various studies that the overall prevalence of epilepsy in India is 3.0 -11.9 per- 10 per 1000 and incidence 0.2 - 0.6 per 1000 population per year.<sup>[1]</sup> It is a psychological disorder involving memory, intellect and mind and present with cardinal features such as transient loss of memory, abnormal movements of body and blackouts.

## BACKGROUND

The oldest medical records show that epilepsy has been affecting people at least since the beginning of history. Throughout ancient history the disease was thought to be a spiritual condition. The world's oldest description of an epileptic seizure comes from a text Akkadian (A language used in ancient Mesopotamia) and was written around 2000 b.c. Epileptic seizures are listed in the code of Hammurabi (1790 B.C.) and the Edwin Smith papyrus (1700 B.C.) describes cases of individual with epilepsy.<sup>[2]</sup>

As per vedic legends after the destruction of Daksha Prajapati *yajana* different diseases are originated like *Gulma*, *Premha*, *Kustha*, *Unmad* etc. and *Apasmara* is due to coming in contact with various types of unclean objects.<sup>[3]</sup> It is due to vitiation of three sharirik doshas and two mansik doshas. In our texts *Apasmara* is included among eight *Mahagada* (most dreadful disease).

Not only in adults it's also affects the children with very severe lakshanas as Our Acharyas had considered "*Graha*" as the main culprit for the diseases in children. Acharya *Vagbhata* has mentioned "*Skanda – Apasmara*" in children. When the child is affected by *Skandapasmara*, it loses and regains consciousness, is irritable, makes dancing like movements with arms and legs, eliminates stools and passes urine accompanied with sound (crying), yawns more and emits froth from the mouth.<sup>[4]</sup>

## EPILEPSY

It is defined by International League Against Epilepsy (ILAE). Epilepsy is a condition with recurrent seizures having paroxysmal event due to chronic, abnormal, excessive hypersynchronous discharges from central nervous system neurons in the brain.<sup>[5]</sup>

According to Indian Academy of Paediatrics Epilepsy is defined as a disorder of the brain characterized by an enduring predisposition to generate epileptic seizures, and by the neurobiological, cognitive, psychological, and social consequences of this condition. The

definition of epilepsy requires the occurrence of at least one epileptic seizures.<sup>[6]</sup>

Practically, Epilepsy is a disease of the brain defined by any of the following conditions.

- (1) At least two unprovoked seizures occurring more than 24 hours apart.
- (2) One unprovoked seizure and a probability of further seizures similar to the general recurrence risk after two unprovoked seizures (approx. 75% or more).
- (3) At least two seizures in a setting of reflex epilepsy.

### Epilepsy in Ayurveda

In Ayurveda there is description of disease *Apasmara* in which *smritinasha* or *tamahpravesha* is main presenting features like wise epilepsy, in which loss of consciousness is main clinical feature. In ayurvedic texts *Apasmara* is including under the group of diseases affecting both mind and body. The etiology of *Apasmara* is identified as intake of unwholesome and unclean food. Practicing unhealthy behaviour, suppression of attribute of mind representing purity and disturbed equilibrium of doshas plays a significant role in manifesting the disease.

### *Apasmara*

It is made up of by two words *Apa* (to loss or leave) and *smara* (memory) i.e., loss of memory and is characterized by occasional loss of consciousness associated with aberrant activities (like *fenadvamanam*, *bibhatsta cheshta* and *apagama of smriti*) and behaviour due to perversion of memory, intellect and other psychic faculties.

### NIRUKTI

स्मृतिभूतार्थविज्ञानमप्रश्च परिवर्जनेअपस्मारः

इति प्रोक्तस्ततोअयं व्याधिरन्तकृत् ॥(सु.उ. 61/3)

As explained by *Acharya sushruta*, *smriti* is context of *Apasmara* is *bhutartha vijnana* i.e. orientation of external world and consciousness or memorize the past and experiences. *Dhi - buddhi(intellect)* is *karya-akarya vibhaga karini* i.e. discriminating power between right and wrong. *Sattva* is referred as *mana(mind)* and *dhairya* (temperance, patience). A patient of *Apasmara* suffers from deterioration of all these three important mental faculties (*dhi, buddhi, smriti*).<sup>[7]</sup>

*Acharya Dalhana* also said that

**अपस्मारः-**"अपशब्दो गमनार्थः, स्मारः स्मरणं, अपगतः स्मारो यस्मिन् रोगे सो अपस्मारः ।

Here meaning of *Apa* is loss and *smara* is memory. The disease in which loss of memory takes place is called *Apasmara*.

## PARIBHASHA (DEFINITION)

According to *Acharya Charaka*

**स्मृतेरपगमं प्राहुरपस्मारं भिषग्विदः ।  
तमः प्रवेश बीभत्सचेष्टं धीसत्त्वसंप्लवात् ॥ (च. चि. - १०/३)**

In Ayurveda *Apasmara* is due to loss of memory. *Apasmara* is defined as the occasional loss of consciousness due to deterioration of *smriti*(memory), *buddhi*(intellect) and *sattva*(mind) characterized by *tamahpravesha*(entering darkness/blackout and *bibhatsachesta* (abnormal movements).<sup>[8]</sup>

**अपस्मारं पुनः स्मृतिबुद्धिसत्त्वसंप्रवादवीभत्सचेष्टमावस्थिकं तमः प्रवेशमाचक्षते ॥ (च. नि. - ८/८)**

(Loss of consciousness and aberrant body activities Due to perversion of memory, intellect, and other psychic faculties is called *Apasmara*)<sup>[9]</sup>

## NIDANA OF APASMARA (CAUSATIVE FACTORS)

**Aaharaj Nidana (Dietary factors)** - (1) viruddh Aahar (2) Malina Aahara.

**Viharaj Nidana (life style factors)**- (1) Vegadharana (2) Gachtamch rajaswala (sex during menstruation) (3) Not following *sadvrita*.

**Mansik Nidana (Psychological factors)**- (1) Excessive chinta, anger, grief, kama, bhaya, shoka, (2) Affliction of *mana* by *raja* and *tama dosha*, (3) *Mithya*, *Ayoga*, and *Atiyoga* of *Indriyarthand Karma*, (4) *kaalik*, *vaachik*, and *mansik karmo ka Mithya*, *Ayoga*, and *Atiyoga*.

## SAMPRAPTI (PATHOGENESIS)

When the persons whose minds are already afflicted by *Rajas* and *Tamas* follow the *nidanas* mentioned earlier (unclean & contradictory property food, unhealthy regimens and behaviour) their *doshas* get exceedingly aggravated and their equilibrium is disturbed and then vitiated *doshas* get through vessels of the heart and when exposed to predisposing psychological factors like excess worry, grief anger and fear then moves upward from the heart and abode all

consciousness to the brain affecting the senses which altering memory this eventually leads to *Apasmara*.<sup>[10]</sup>

### **SAMPRAPTI GHATAKA**

It is the disease of *manovahi srotasa* and its *udbhavasthana* is *hridya*. The doshas involved in this is *vata*, *pitta*, *kapha*, *raj* and, *tama*. *Dushya* is *Rasa Dhatu*, *mana*, *Adhithana* is *Man* and *indriya*.

### **PURVARUPA (PRODROMAL SIGN)**

The premonitory symptoms of *Apasmara* are *Bhravyudasah*(excess movements of eyebrows), *satatamaksnorvaikrtama*(deviation of eyes), *hrudkampa* (palpitation), *sweda* (sweating), *dhyanam*, *moorcha* (syncope), *pramoodatha nidranaash* (insomnia), *ashabdha sravanam* (auditory hallucination), *bhrama*, *tamo darshana*, *avipaka*, *aruchi*, *kukshiatopa* e.t.c.<sup>[11]</sup>

### **RUPA (SIGN & SYMPTOMS)**

Rupa of *Apasmara* according to different Ayurvedic classics are. *Dantannkhadan*(Teeth biting), *patatikshito*(falling on ground) *Akshanovaikratama* (Deviation of eyes), *Fenadvamanam* (Dribbling of frothy saliva), *Karcharanaeishnrityativa* (Convulsions in the hands and feet), *Bhrama* (visual hallucinations).<sup>[12]</sup>

### **BHEDA (TYPES OF APASMARA)**

- (1) **Vataja Apasmara**-Frequent fits, regaining consciousness in shortest time Interval, bulging eyes, excessive crying, Frothing at mouth, reddish rough and blackish nails, eyes, face and skin, hallucination and trembling.
- (2) **Pittaja Apasmara**- Regaining consciousness in shorter periods, scratching of ground, greenishyellow and coppery nails, eyes, face and skin and vision of bloody, agitated, irritated, frightful and burning objects.
- (3) **Kaphaja Apasmara**-Has features of prolonged fits with delayed recovery, increased frothing at mouth, white nails, Eyes, face and skin and vision of white, heavy, unctuous, smooth objects.
- (4) **Sannipataja Apasmara**- Is caused by the simultaneous vitiation of all the three doshas that gives rise to a combination of symptoms and signs.

**VEGAKALA**- *Vataja Apasmara*-12days, *Pittaja Apasmara*-15 days, *Kaphaja Apasmara*-1month.<sup>[13]</sup>

The duration and severity are more in *Vataja Apasmara* due to *chala*(movable) *laghu*(light) & *sukshma* (minute) *guna* of *Vata*. Due to these *gunas* *vata* controls all activities of body and mind. The regulation & coordination of the sequences of sense and locomotor organs-mind-intellect-and soul is performed by *vata*. The clinical manifestation of *Vataja Apasmara* is due to repeated, excess hyposynchronous discharges in neurons of central nervous system. the epilepsy of neurological origin either it may be due to trauma of brain or transient hypoxia leading to dysregulation of brain function can be categorized under this type of *Apasmara*.

In *Pittaja Apasmara* the duration and frequency of seizural attacks will be comparatively less than *vataja apasmara*. it may be due to *ushna* (hot) and *tikshna* (acrid) *guna* of *pittaja dosha*. *Tamahpravesh* is a sign of *pitta*-dominance in which metabolism or transformation at the cellular level might be an underlying cause. The *pitta* play an important role for regulation of all metabolic activities in body. The derangement of metabolism at the cellular level is an important pathological factors and the enzymatic pathway is also responsible for the pathology. The types of epilepsy originated due to metabolic disorder like hepatic encephalopathy can be included in this.

In *Kaphaja Apasmara*, *sthira* (stable). *manda*(slow) and *snigdha*(unctuous) *gunas* of *Kapha* is responsible for delayed onset and less severity. Hypoperfusion and hypovolemic conditions leading to cerebral dysfunction can be considered as attributes of *Kaphaja Apasmara*.

### CHIKITSA (TREATMENT)

Management of *Apasmara* depending on the predominating of *doshas* influences of *agantu* (exogenous) factors & three stages discussed below.<sup>[14]</sup>

(1) **Samsodhana chikitsa(purification)**- Based on *doshas* dominance. *Tikshana samsodhana* is indicated in *Apasmara chikitsa* like- *Vataja Apasmara* shall be treated mainly with *Basti* (medicated enema). *Pittaja Apasmara* shall mainly be treated with *Virechana* (purgation). *Kaphaja Apasmara* shall mainly be treated with *vamana*.

(2) **Sattvavajya chikitsa (Assurance and counselling therapy)**- After proper purification by above therapies assurance is given. *Sattvavajya Chikitsa* – It is the non-pharmacological approach for treating the mental disorder and equal to psychotherapy. It should be aimed to make the patient happy and satisfied.

(3) **Shanshamana Chikitsa:** It includes oral use of different single and compound Herbo-minaral formulation like *Kushmanda Ghrita*, *Panchagavya Ghrita*, *Mahapanchagavya Ghrita*, *Bramhi Ghrita*, *Kashmaryadi Ghrita*.

**Bahi Parimarjana Chikitsa** eg. Massages with *Sarshapa taila*, *Katabhyadi taila*, *palankshadi Taila*. *Pradhamana nasya* (strong nasal insufflations) etc.

**Rasayana Chikitsa:** - As it is chronic disease, one should use the Rasayana drugs like *Vacha*, *Guduchi*, *Shankhpushpi* etc.

Role of diet, yoga and meditation is very important in management of *Apasmara* (epilepsy).

## DISCUSSION

*Apasmara* is a disease due to vitiation of three *sharirik doshas* and two *manshik doshas*. It is a disease of mind in which memory/consciousness, intellect and purest quality of mind are affected. *Apasmara* can be compared with epilepsy but not all epeleptis can be considered as *Apasmara* and all *Apasmara* cannot be considered as epileptic seizures. An epileptic seizure with impaired /loss of memory and consciousness can only be considered as *Apasmara*.

Diet plays significant role in pathophysiology of psychiatric diseases. Improper and impure diet is considered to affect mental functions adversely leading to formation of background for disease. The dietary causative factors may act on gut-brain axis to affect the neuro-pathology in case of psychiatric diseases like *Apasmara*. Heart (center of consciousness and emotional intelligence) and brain (center of memory and logical intelligence) together form *manovaha srotas* (functional system of mind). The co-ordination of these two centers is important for normal functioning of mind. If this is afflicted, it leads to psychiatric diseases.

The line of treatment should also be planned by keeping these factors in mind. Removal of obstruction of *dosha* in the heart-brain connection, channels and mind by strong purification therapies is principal management of *Apasmara*. *Basti* (therapeutic Enema in *vata* Dominant *Apasmara* *virechana* (therapeutic purgation in *Pitta* Dominant *Apasmara* and *vamana* (therapeutic emesis) in *kapha* dominant *Apasmara* are specific therapies.

*Ashwasana* (assurance therapy) and psychological counseling are advised to remove psychological stressors that provoke *Apasmara*.

## CONCLUSION

In recent years the incidence of psychological disease has shown a treamenduos increase throughout the world. The disease and its management have high impact on the quality of life of the affected person and also discrimination in education, employment & social acceptance. As per *Ayurveda* *Apasmara* has been described among the *maharogas* which



affecting both the mind and the body. Causative factors of *Apasmara* can be categorized under dietary, lifestyle psychological and iatrogenic factors. The description of *Apasmara* including etiological background, prodromal signs and symptoms, cardinal signs go very close to the description of Epilepsy so analysis of the heart brain connection is very important in the pathology of *Apasmara*, Even though *Ayurveda* has numerous preparation for the management of *Apasmara* but most of them are yet to be explored in the present day especially during acute condition. The duration of treatment depends upon prognosis of the disease. A disease at the onset may be curable but if not treated could be worsen into a palliable on incurable variants. And for this it is necessary to understand the disease and its causative factors properly so disease can be diagnosed early and proper treatment will be started at time. For the purpose of understanding the disease this article is a small initiative.

## REFERENCES

1. Annals of Indian Academy of neurology, Epilepsy in India: Epidemiology and Public health.
2. Epilepsia, 2003; 44(suppl.6): 12-14. Blackwell Publishing. Inc. epilepsy Wikipedia.
3. Charaka Samhita of Agnivesha by Vd. Sataynarayan Shastri- Chaukhambha Bharti Academy, 22 edition part 1(nidana sthana 8/11).
4. Astangahrdayam, by Kaviraj Atrideva Gupta with vidyotini hindi commentary. Chaukhamba Orientalia uttar sthana-3/9-11).
5. ILAE.<https://doi.org/10.1111/epi.13670>.
6. Parthasarathy et al: IAP textbook of pediatrics 7th edition, JAYPEE Publication.
7. Sushruta Samhita edited by Dr. Ambika dutta Shastri, Chaukhamba Sanskrit Sansthan Varanashi, part 2(uttarsthana-61/3).
8. Charaka Samhita of Agnivesha by Vd. Sataynarayan Shastri- Chaukhambha Bharti Academy, 22 edition part 1 (chikitsa sthana- 10/3).
9. Charaka Samhita of Agnivesha by Vd. Sataynarayan Shastri- Chaukhambha Bharti Academy, 22 edition part 1 (nidana sthana 8/5).
10. [https://www.carakasamhitaonline.com/mediawiki-1.32.1/index.php/Apasmara\\_nidana](https://www.carakasamhitaonline.com/mediawiki-1.32.1/index.php/Apasmara_nidana).
11. Charaka Samhita of Agnivesha by Vd. Sataynarayan Shastri- Chaukhambha Bharti Academy, 22 edition part 1(nidana sthana 8/6).
12. Dr. Divya K S et al August (2016) understanding of Apasmara w.s.r. to Epilepsy, inIAMJ, 4(8).s.
13. Charaka Samhita of Agnivesha by Vd. Sataynarayan Shastri- Chaukhambha Bharti



Academy, 22 edition part 1(chikitsa sthana- 10/13).

14. Kumar Dileep et al Ayurvedic formulations for the management of epileptic disorders: IRJP, 2012; 3(6).