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AYURVEDIC MANAGEMENT OF APASMARA (EPILEPSY) ALONG WITH ANTI-EPILEPTIC DRUGS: CASE STUDY

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ABSTRACT

Epilepsy is the most common presentation in a neurological setting and stands next to stroke and dementia in its prevalence. The disease and its management have high impact on the quality of life of the affected person and also discrimination in education, employment and social acceptance. In *Ayurveda*, the similar presentation is named as '*Apasmara'* has been explained with its aetiology, symptoms, diagnosis and management. The available data is based on the clinical finding only. *Acharya Charaka* has mentioned *Shodhana* therapy along with *Shamana* therapy as a line of treatment of *Apasmara.* **Aim & Objective**: To assess the efficacy of *Panchakarma* in the management of *Apasmara* WSR to Epilepsy with AED (Anti-Epileptic Drugs) **Setting:** *Panchakarma* OPD & IPD, IPGT & RA, Jamnagar, Gujarat, India. **Method**: *Panchakarma* was done without withdrawing the ongoing AED and patient with seizure. Assessment was done before treatment, after *shodhana* and after *shamana* 2 months of follow-up. **Result-** *Panchakarma* is effective in the management of *Apasmara* and to improve the quality of life of the affected one.

Key words: Anti-Epileptic Drugs, *Apasmara, Brahmighrita*, Epilepsy, *Panchakarma*

INTRODUCTION

Epilepsy is a Greek term meaning "to be seized" or "to be overwhelmed by surprise"[1]. Epilepsy is "a chronic disorder characterised by recurrent seizures, which may vary from a brief lapse of attention or muscle jerks, to severe and prolonged convulsions.

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The seizures are caused by sudden, usually brief, excessive electrical discharges in a group of brain cells (neurones)"[2]. In the South-East Asia Region of WHO, 27 % of disability is due to neuropsychiatric disorders, including epilepsy. Studies from different parts of India reveal that the prevalence varies from 8.8/1000 in Bangalore to 3/1000 near Calcutta.[3] In epilepsy, the normal pattern of neuronal activity becomes disturbed, causing strange sensations, emotions, and behaviour or sometimes convulsions, muscle spasms, and loss of consciousness. Anything that disturbs the normal pattern of neuron activity from illness or brain damage to abnormal brain development can lead to seizures. A measurement of electrical activity in the

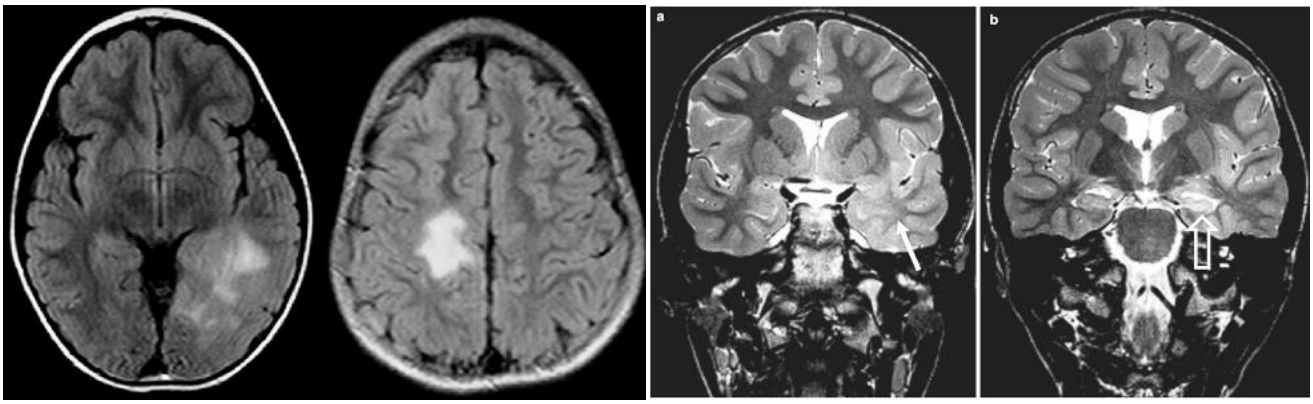
brain with EEG as well as MRI or CT scan is the common diagnostic test for Epilepsy [4].About ¾th of patients diagnosed with epilepsy can control their seizure with the available AED's. However, about 25 to 30% will continue to experience seizures even with which is called intractable epilepsy [5]. *Apasmara* is defined by *Charaka* as *Apagama* of *Smrti* associated with *BibhatsaChesta* due to derangement of *Dhi* and *Sattva*[6]. *Apasmara* has described by *Dalhana* as the disease during the attack of which *Smrti* is lost [7]. The features, *Tamah Pravesa* is equivalent to *Jnana Abhava* i.e., absence of consciousness, *Bibhatsa Chesta* includes all loathsome expressions and *Samplava* indicates *Vibhrama* or perversion [8]. Some of the concepts of Ayurveda regarding *Apasmara* project views which seem to contradict the presently held opinion. But it has to be borne in mind that these principles have stood the test of time and have offered solace to the ailing mankind through centuries[9]. *Acharya Charaka* has mentioned purification therapy as *Vamana* (Therapeutic controlled emesis), *Virechana* (Therapeutic controlled purgation) and *Basti* (Medicated enema) along with palliative therapy as a line of treatment of *Apasmara*[10].

CASE STUDY:

A 24 years old male patient came to OPD of *Panchakarma* with complaints of partial epileptic seizures, weight gain, fatigue and short term forgetfulness since 7 years. Past history revealed first convulsive attack at 6 years age of patient followed by further seizures at the age of 17 years. The patient was placed on AEDs, 750mg Levetiracetam, 300 mg Oxcarbazepine and clobazam 30mg per day with duration of 7 years. Investigations show normal haematological and biochemical reports.

An EEG showed evidence of epilepsy. In CT-scan impression, there was focal hypodense area noted involving left periventricular deep white matter, focal demyelination and focal old ischaemic lesion. MRI showed impression of small area of gliosis in left frontal periventricular white matter and left hippocampal sclerosis. [Figure-1]

Figure-1: MRI Showed Impression Of Small Area Of Gliosis In Left Frontal Periventricular White Matter (A) And Left Hippocampal Sclerosis(B).



Drug history: Patient was taking the medicines (AEDs) as per given in [Table-1].

Table-1: Patient with AEDs

Sr.no.	Drug name	Trade name	Dose	OD/BD/TDS
1.	Oxcarbazepine	Trileptal	600 mg	1 BD
2.	Levitiracetam	Keppra	750 mg	1 BD
3.	Topiramate	Topamax	50 mg	2 TDS
4.	Clobazam	Frisium	10 mg	1 TDS

SETTING: *Panchakarma* OPD and IPD, IPGT & RA, Jamnagar, Gujarat, India.

METHOD: *Panchakarma* was done without withdrawing the ongoing AED and those with seizure. Assessment was done before treatment,

after *shodhana* and after *shaman* for 2 months of followup.

TREATMENT PLAN:

For better and further case management patient had been consulted and after assessing strength, *prakriti*, *agni*, etc., *Panchakarma* was planned for this patient. Initiation with *Deepana-Pachana* and *Udavartana* (Powder massage) followed by internal oleation, therapeutic purgation and *samsarjanakrama*. After then internal medicines and *Nasya* (*Pratimarsanasya*) with *Brahmighrita* was advised for one month. He had advised for come to OPD weekly for regular follow up. Details of *Panchakarma* procedure, drugs and dose are given in [Table-2] and details of internal medicines used given in [Table-3].

Table-2: *Panchakarma* procedures

Si.No.	Treatment	Drug used	Dose	Duration
1	*Udavartana*	*Yava-Triphalachurna* [Table-5]	Q.S.	7 days
2.	*Dipana-Pachana*	*Trikatuchurna* [Table-6]	2gm TDS	3 days
3.	*Snehapana*	*Panchagavyaghrita* [Table-7]	*Vardhamanamatra*	5 days
4.	*SarvangaAbhyanga-BashpaSwedana*	*Bala* oil for *Abhyanga*	Q.S.	3 Days
5.	*VirechanaKarma*	*Trivrittaavaleha* [Table-8]	60gm	1 Day
6.	*SamsarjanaKrama*	As per classics	-	5 Days
7.	*NasyaKarma* (*Pratimarsha*)	*BrahmiGhrita* [Table-9]	2 drops in each nostril	1 Month

Table-3: Internal Medications used for patient of Epilepsy

Si.No.	Drug/ Formulation	Dose	*Anupana*	Time of Administration
1.	*Mansyadikwatha* [Table-10]	40 ml decoction B.D.	Normal water	Morning& Evening
2.	*Aampachanavati* [Table-11]	500 mg 2 TDS	Normal water	After meal
3.	*ErandbhristhaHaritakichurna* [Table-12]	3gm	Luck warm water	At night Bed time

ASSESSMENT CRITERIA:

The assessments were done before treatment, at the end of 1st month, at the end of 2nd month and after the follow up of one month. It is based on the four parameters. Severity of attack, Frequency of attack, Duration of attack and Post ictal features[11].[Table-4]

Table-4: Effect of *Panchakarma*therapy on symptoms of Epilepsy

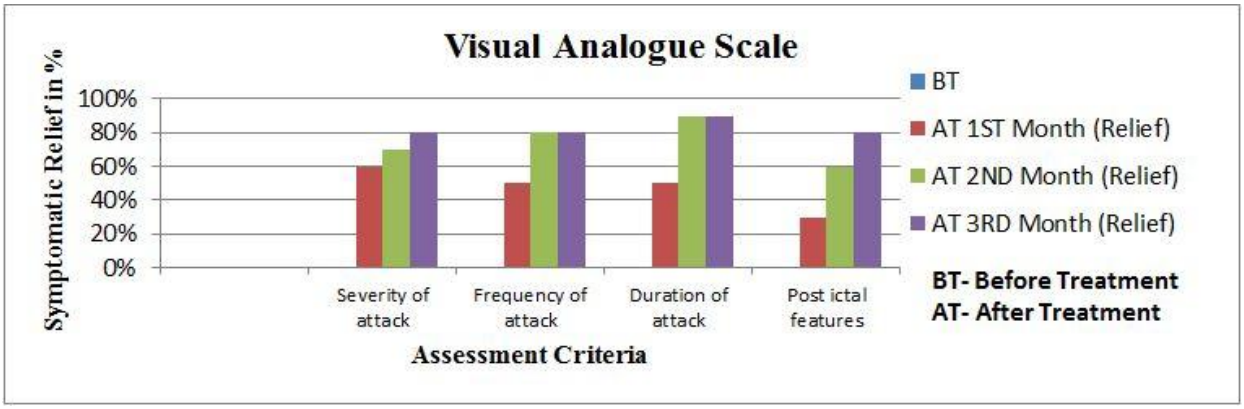
Assessment Criteria	BT	AT 1ST Month	AT 2ND Month	AT 3RD Month
Severity of attack	Sudden - Moderate	Provoked - Moderate	Provoked - Mild	Provoked - Mild
Frequency of attack	4 times / week	2 times / week	1 time / week or no occurrence	1 time / week or no occurrence
Duration of attack	30 sec – 1 min	10 – 15 sec	2-3 sec	2-3 sec
Post ictal features	Perspiration, Fatigue, Short term memory loss	Fatigue , Short term memory loss	Less severity of features	Very less severity of features
Weight	106 kg	99 kg	96 kg	94 kg

(BT-Before treatment, AT-After Treatment)

RESULT & OBSERVATION:

Result: Marked improvement was observed after *Panchakarma* in severity of attack, frequency of attack, duration of attack and post ictal features. Improvement was seen in Symptoms assessed by Visual analogue scale shown in [Figure-2]

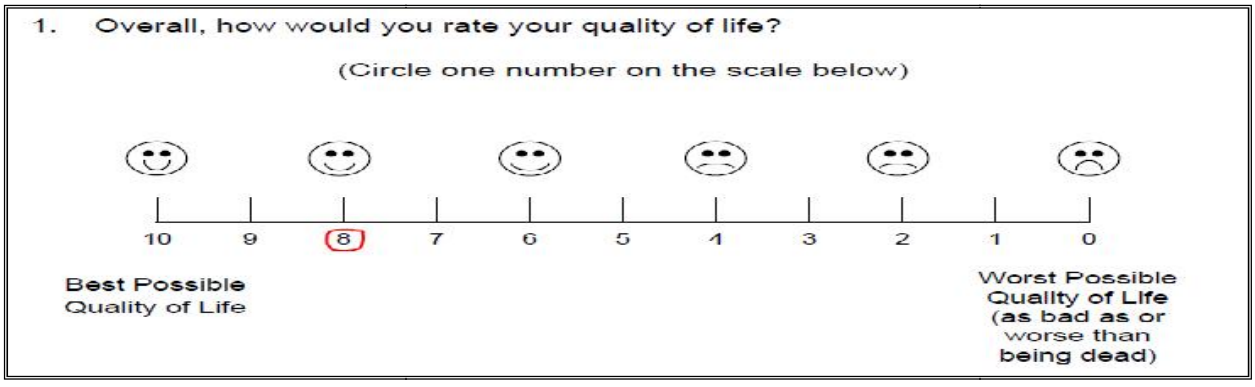
Figure-2: Visual analogue scale for assessment of improvement in Epilepsy



Observation of *Virechanakarma*: On the day of *Virechanakarma*, patient went to lavatory for 20 times, which considered as *vegas*. Patient attained moderate *Shuddhi* (cleansing of body).

Patient's quality of life has been assessed by QOLIE-31(Version 1.0)[12].Overall Quality of life rated by patient as best possible quality of life as he felt.[Figure-3]

Figure-3: Overall rate of patient's Quality of life of Epilepsy



DISCUSSION:

Even though medical world claims of the advancements in the management of *Apasmara*, drugs don't work as they expect. The present AED medication has so many drawbacks like adverse reaction, drug interaction and teratogenicity. Cognitive impairment to an extent is also seen in some patients with epilepsy. *Panchakarma* and *Ayurvedic* medicines work astonishingly in this area and can do a spectacular job.

In process of *Yava-triphalachurna Udavartana*, friction of the drug to the skin occurs. So it increases local temperature and opens circulatory channels, facilitates the metabolic activity[13].

Trikatuchurna has *Deepana* and *pachana* properties, which control the formation of *ama* in the initial stage, which is very important in preventing the manifestation of the disease. *AcharyaCharaka* has described *shodhana* as a line of treatment so *Virechanakarma* has been chosen. *Ghrita* has a main role in the management of diseases with prominent psychological component, like *Apasmara*. *Panchagavyaghrita* is indicated in *Apasmara* due to

its property in bringing all the *doshas* to normalcy. *SamyakaVirechana* contributes *indriya-samprasada* (cleansing of all senses) and detoxification of body[14], which resists the side effects of AED's.

Mansyadikwatha is having analgesic activity[15]. The main ingredients of *Mansyadikwatha* are *Parasikayavani* and *Jatamansi*. Both of these drugs process *Nidrajanana* (Sedative effect) and anti-psychiatric actions [16].So it is useful in anxiety and convulsive disorder like Epilepsy. Contents of *Aampachana Vati* act to digest (waste food material) and prevent adhesion of the channels. *Erandbhrusthaharitaki* acts as laxative and helps to let out the undigested material. Nose is the entrance of the head so *Nasya* (nasal drug application) directly effects on brain[17]. *Brahmighrita* also indicated in *Apasmara* due to its anticonvulsant property [18].

CONCLUSION:

Through one case report, study cannot be concluded but with the help of *Panchakarma* makes him dream a real one. *Panchakarma* like *Virechana* and *Nasya* are safe along with Anti-epileptic drugs without any interactions and adverse effect. Hecans exponential return of a system to equilibrium after a disturbance of his complaints and also relaxation from high doses of AEDs. He got discharged after one month without any evident of complication. He considers his epilepsy as part of health towards best health imaginable state. Patient is still on the clinical follow up. So such treatment plan can be consider for large sample size.

Table-5: *Yavachurna+Triphalachurna* (AFI Part 1, 2nded, pp110) Used for *Udavartana*

No.	Name	Botnical name	Part used	Reference	Quantity (%)
1.	*Yava*	*Hordeumvulgare*	Seeds	*Bhavprakash Dhanyavarga*	50
2.	*Haritaki*	*Terminaliachebula*	Dried fruit	API 1,Vol 1,pp 47	50
3.	*Bibhitaki*	*Terminaliaballerica*	Dried fruit	API 1, Vol 1, pp 27	
4.	*Amalaki*	*Emblicaofficinalis*	Dried fruit	API 1 Vol 1,,pp 5	

Table-6:*Trikatuchurna* (AFI Part 1, 2nded, pp110) Used for *Deepana-Pachana*

Si.No.	Name	Botnical name	Part used	Reference	Quantity (%)
1.	*Shunthi*	*Zingiberofficinale*	Rhizome	API 1,Vol 1,pp 103	33.33
2.	*Maricha*	*Pipernigrum*	Fruit	API 1,Vol 3,pp115-117	33.33
3.	*Pippali*	*Piperlongum*	Fruit	API 1,Vol 4,pp 91-92	33.33

Table-7: *Panchagavyaghrita* (*Charakachikitsa* 10/17) Used for *Snehpana* (Internal oleation)

Si.No.	Contents	Part used
1.	Cow ghee	1 part
2.	Cow urine	1 part
3.	Cow curd	2 parts
4.	Cow milk	3 parts
5.	Cow dung	½ part

Table-8: *TrivritAvaleha* (*AshtangaHridayaKalpasthana* 2/9) Used for *Virechana Karma* (Therapeutic purgation)

Si.No.	Name	Botnical name	Family	Part used
1.	*Trivrita*	*Operculinaturpethum* (Linn.)	Convolvulaceae	Root bark
2.	*Tvak*	*Cinnamomumzeylanicum*	Lauraceae	leaves
3.	*Ela*	*Elettariacardamomum*	Zingiberaceae	Seed
4.	*Tamalapatra*	*Cinnamomumtamala*	Lauraceae	leaves
5.	*Madhu*	Honey	-	-

6.	*Sita*	Sugar candy	-	-

Table-9: *Brahmighrita* (*Charakachikitsa* 10/25) Used for *Nasya*

Si.No.	Name	Botnical name	Family	Part used
1.	*Brahmi*	*Bacopamonnieri*Linn.	Scrophulariaceae	Whole plant
2.	*Vacha*	*Acoruscalamus*Linn.	Araceae	Rhizome
3.	*Shankhapushpi*	*Convolvulus pluricaulis* Choicy.	Convolvulaceae	Whole plant
4.	*Kustha*	*Saussurealappa*	compositae	Root
5.	*Goghrita*	Cow's ghee	-	-

Table-10: *Mansyadikwatha* (*SiddhyogaSamgraha- Apasmara, Aksepa*)

Si.No.	Name	Botnical name	Part used	Reference	Quantity (%)
1.	*Jatamansi*	*Nardostachysjatamansi*	Root	API part 1, Vol 1,pp 51	72.73
2.	*Aswagandha*	*Withaniasomnifera*	Root	APi part 1, Vol 1, pp 10	18.18
3.	*ParasikYavani*	*Hyoscyamusniger*	Seed	Api Part 1, Vol 5, pp 130	9.09

Table-11: *Aampachanvati* (*Chikitsapradip*)

Si.No.	Name	Botnical name	Part used	Reference	Quantity (%)
1.	*Haritaki*	*Terminaliachebula*	Dried fruit	API 1,Vol 1,pp 47	12.50
2.	*Sunthi*	*Zingiberofficinale*	Rhizome	API 1,Vol 1,pp 103	12.50
3.	*Maricha*	*Pipernigrum*	Fruit	API 1,Vol 3,pp115-117	12.50
4.	*Pippali*	*Piperlongum*	Fruit	API 1,Vol 4,pp 91-92	12.50
5.	*Suddhakaraskara*	*Strychnusnuxvomica*	Seed	API 1,Vol 4,pp 140-142	12.50
6.	*Suddhahingu*	*Ferulafoetida*	Exudate	API 1,Vol 1,pp 49	12.50
7.	*Goghrita*	*Cow'sghee*	-	API 1,Vol 6,pp 218	12.50
8.	*Saindhavalavana*	Rock salt		API	12.50
9.	*Kumariswarasab-havna*	*Aloebarbedensis* Mill.	Leaf	API 1,Vol 1,pp 62	Q.S.

Table-12: *Erandbhristhaharitakichurna* (*BhaishajyaratnavaliAmavatachikitsa*-29/14)

Si.No.	Name	Botnical name	Part used	Reference	Quantity(%)
1.	*Balaharitaki*	*Terminalia*chebula	Unrippened fruit	API 1,Vol 1,pp 47	98
2.	*Erandataila*	*Ricinuscommunis*	Liquid, seed oil	API 1,Vol 3,pp 51	2

REFERENCES

1. http://www.epilepsy.org/about-epilepsy (Last Browed on 21.05.2016)
2. http://www.who.int/mediacentre/factsheets/fs999/en/ (Last Browed on 21.05.2016)
3. World Health Organization Regional Office For South-East Asia/International Bureau of Epilepsy/EPILEPSY IN THE SOUTH-EAST ASIA REGION "Out of the Shadows"; Chapter 3 Epidemiology/3.1/19p.
4. UK Misra, J Kalita, Clinical Electroencepha-lography, 1st Edition, Elsevier publishers, 2009, Chapter 17, 371-373p.
5. Humberto Foyaca Sibat, Novel treatment of epilepsy, Intech publishers, 2011, 69-72p.
6. Charaka Samhita by Chakrapani, "Ayurveda dipika", Prologue by Prof. R.H. Singh/Chukhambha Surbharati Prakashana/ Charaka Samhita Chikitsasthana- 10/3; 474p.
7. Sushruta Samhita by Dalhanacharya "Nibandhsangraha" vyakhyanidanasthana and Shri Gayadasa "Nyayachandrika"/Krishnadas Academy, Varanasi/Edition Reprint 1/ SushrutaSamhitaUttarasthana 61/2-3/ 799p.
8. Ibidem 6
9. Usha K S. *et al* "A clinical study on Apasmara (epilepsy) and its management with

Maha-Panchagavya Ghrita" PG Dissertation submitted to Gujarat Ayurved University at 2001/ IPGT & RA, Jamnagar, Gujarat
10. Ibidem 6; 10/16: 474p.
11. Banarjee P, Filippi D, The descriptive epidemiology of research- a review. Epilepsy research 2009; 85(1): 31-34p.
12. Quality of Life In Epilepsy-QOLIE-31(Version 1.0) Professional PG services, a division of physicians world communications the Epilepsy Therapy Project/https://www.rand.org/content/dam/rand/www/external/health/surveys_tools/qolie/qolie31_scoring.pdf
13. M.A. Pandit, Clinical evaluation of Guduchyadi Yoga and its combination with Udavartana by Haritaki in the management of Sthaulya W.S.R. to Obesity/J.Pharm.BioSci.(2013)100-104p.
14. Ibidem 6, Siddhi sthana- 1/17. 680p.
15. Shreevastha, Ravishankar B, Dwiwedi R R, Rao Ravi S, Krishnamurthy M S, Experimental evaluation for Analgesic activity of Mansyadikwatha/ IJRAP, 2011, 2 (4) 1051-1053p.
16. Billore K V, Yelne M B, Dennis T J, Chaudhari B G. Database On Medicinal Plants Used In Ayurveda, Vol. 7. New Delhi: Central Council for Research in Ayurveda & Siddha; 2005. 320,136,434p.
17. Ibidem 14,9/88; 722p.
18. ShitalA.Giramkar, Omkar P. Kulkarni, Suresh D. Jagtap, "Anti-convulsant potential of commonly practised formulations of Brahmi (Bacopamonnieri Linn.) in Wistar rats"/ Journal of pharmacy research (2013) 1-5p.

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