Epilepsy

S. Gopinadhan[1], G.S.N. Murty[2], M.S. Pramanik[1], R. Shaw[1], V.A. Balachandran[1], T.N.S. Kurup[1], E.C. Thomas[1], T. Vasanthiamma[1], B. Indira[1], P.S. Sivadas[1], Anil Kumar Vichitra[1], P.G. Mohanan[1], K.R. Janardanan Nair[1], P. Paul Sumithran[1], Ch. Raveendar[2], Joseph Thomas[2], D.M. Rao[2], A.K.N. Singh[2], K.C. Muraleedharan[2], R.V.R. Prasad[2], B.S.J. Raja Kumar[2], T. Sosamma Vargheese[2], S. Geethadevi[2]

[1]*Central Research Institute (H), Kottayam (Kerala).*
[2]*Regional Research Institute (H), Gudivada (Andhra Pradesh).*

Objectives: The objectives of this study were to evolve a group of most effective homoeopathic medicines in the management of epilepsy, to identify their reliable indications, most useful potencies, frequency of administration and relationship with other medicines.

Methods: A multicentric, prospective observational study was carried out during the period 1980-2005 at two Institutes of CCRH. A total of 636 patients including 335 males and 301 females were studied. The patients with history of two or more seizures (grand mal or petit mal) with or without aura were enrolled. Epileptic patients due to cerebrovascular disease or those with brain tumors were excluded from the study. Frequency, duration, intensity of attacks and status of improvement were the parameters to assess the outcome.

Results: Five hundred and forty six patients were followed up, out of which 15 patients were cured, 498 patients showed various degrees of improvement, i.e. marked improvement in 116 patients, moderate improvement in 178 patients and mild improvement in 204 patients; 32 patients did not improve, and one case became worse. Medicines like *Agaricus muscarius,* 80.95% of 21; *Belladonna,* 96.67% of 30; *Cicuta virosa,* 86.36% of 22; *Cina,* 76% of 25; *Cuprum metallicum,* 91.91% of 138, *Gelsemium* 75.86% of 58; *Natrum muriaticum* 75% of 16 were found to be more useful medicines in comparison to others.

Conclusion: Homoeopathic medicines showed a positive role in managing the patients of epilepsy. The objectives to identify a group of useful medicines and their reliable indications could only be achieved. A further study based on high quality laboratory diagnosis and statistical tools is suggested for scientific validation.

Key words: homoeopathy; epilepsy; observational study; agaricus muscarius; belladonna; cicuta virosa; cina; cuprum metallicum, gelsemium; natrum muriaticum

Introduction

Epilepsy is a disorder characterized by recurrent seizures of cerebral origin, presenting with episodes of sensory, motor or autonomic phenomenon with or without loss of consciousness. It is the second most common chronic neurological condition seen by the neurologists. It is estimated that there are 55,00,000 persons with epilepsy in India, 20, 00,000 in USA and 3, 00,000 in UK[1].

An epileptic fit may be defined as a disorder of cerebral function, usually associated with a disturbance of consciousness and accompanied by a sudden, excessive electrical discharge of cerebral neurons. Epilepsy may be classified into two broad groups: *generalized seizures* in which loss of consciousness is accompanied by generalized, symmetrically synchronous EEG discharges and *partial or focal fits* in which the discharge arises in a localized area of the cortex, and consciousness may be retained *to* some extent. In majority of patients, epilepsy arises from causes which cannot be identified. There are two common varieties of *generalized fits-grand mal and petit mal*[2].

The care of the patient comprises social, psychological and medicinal aspects. The condition, because of folklore and superstition carries overtones of disgrace. Patients, their relatives and large number of general public believe that epilepsy bears a stigma. Most patients are more socially disabled by feelings of bitterness and aggression engendered by society's rejection than by their fits[2].

There is risk of using antiepileptic drugs in elderly because of associated comorbidity with other disorders[3], during pregnancy due to risk of malformation in new born[4]. There are also cognitive changes from using antiepileptic drugs. At this point, homoeopathic medicines would be beneficial as regards its cost effectiveness and absence of adverse effects.

The various case records[5-32] in homoeopathic armamentarium prove the usefulness of homoeopathy in treatment of epilepsy. However, various homoeopathic medicines for the treatment of the disease, 'Epilepsy', as seen in various homoeopathic repertories need verification. From the review of the literature, it appears that so far no significant work has been done taking large sample size. As such, there was a need to explore the effect of homoeopathic medicines otherwise indicated for the various diagnostic symptoms of epilepsy, in the homoeopathic literature. In this backdrop, the CCRH undertook this study with the intention of establishing the usefulness of homoeopathic therapy in the treatment of epilepsy.

Aims and Objectives

To evolve a group of most useful homoeopathic medicines in the management of the epilepsy, to identify their reliable indications, most useful potencies, frequency of administration and relationship with other medicines.

Material and Method

A multicentric, prospective observational study was carried out during the period 1980-2005. A total of 636 patients, consisting of both males and females, between the age ranging from 1 year to 78 years, suffering from epilepsy were enrolled from the out patient departments of Clinical Research Institute (H), Kottayam (Kerala) during the period April 1980 – August 2005 (unpublished data) and Regional Research Institute (H), Gudivada (Andhra Pradesh) during October 1984 – March 2003 (unpublished data). The patients with history of two or more seizures (grand mal or petit mal) or attacks with or without aura were included, while patients having underlying cause(s) such as cerebrovascular disease, or those with brain tumors were excluded from the study. Patients with duration of complaints ranging from one day to 45 years were enrolled. The treatment was carried out for a period of 1 month to more than 5 years.

Medicines were prescribed considering the following factors: causative (miasmatic, predisposing and precipitating), generalities, modalities, presenting complaints, constitutional features, and repertorial totality. However, in some patients, prescriptions were based on other characteristic symptoms such as the seasonal aggravation or the keynote. The parameters adopted to assess the intensity/severity of attacks and those to assess the improvement status at the end of the treatment are mentioned below.

Parameters to assess the intensity/severity of attacks:

Mild	–	Duration of epileptic attack less than one minute
Moderate	–	Duration of epileptic attack one minute to three minutes
Severe	–	Duration of epileptic attack more than three minutes.

Parameters to assess the improvement status:

Cured	:	Complete removal of subjective and objective symptoms and thereafter no recurrence for three years consecutively.
Marked improvement	:	Complete removal of subjective and objective symptoms, thereafter no recurrence for less than 3 years consecutively.
Moderate improvement	:	Complete removal of subjective symptoms.
Mild improvement	:	Partial relief in subjective and objective symptoms.
No improvement/ status quo	:	No response after 3 months of treatment.
Worse	:	Aggravation of subjective and objective symptoms.

Observations

Most of the patients in this study fall into age group of 5 – 40 years (73%) (Figure 1). Patients included from both sexes i.e. 335 males and 301 females.

The duration of complaints reveals that 121 patients suffered from epileptic attacks for a period of less than 1 year; 81 patients suffered for a period of 1 to less than 2 years; 117 patients had epilepsy with duration of 2 to less than 5 years; 97 patients for 5 to less than 10 years; 90 patients suffered for a period of 10 to less than15 years; 57 patients suffered for a period of 15 to less than 20 years while 70 patients suffered for more than 20 years.

Maximum epileptic patients, 448 (70.4%) had grandmal type epilepsy, 138 (22.7%) patients suffered from petit mal epilepsy, febrile epilepsy was observed in 22 (3.5%) patients, focal epilepsy in 17 (2.7%) patients, status epilepticus was observed in 9 (1.4%) epilepsy.

There were varied predisposing and precipitating factors responsible for developing epilepsy. 108 patients had hereditary predisposition, mental stress acted as precipitating factor in 170 patients while physical stress was found to be the cause of epilepsy in 216 patients. It was observed that difficult labor was also one of the causes in producing epilepsy in 10 patients; 53 patients developed epilepsy due to trauma, 22 patients due to fever while in 216 patients the cause was not known.

The patients at CRI, Kottayam were analyzed to arrive at the miasmatic cause of epilepsy. Analyzing all the case records in respect of physical, mental, clinical features, it was observed that psora was the predominantmiasm in 360 (85.3%) patients, 21 (4.98%) had syphiliticmiasmatic background, 18 (4.3%) were of tubercular origin, 17 (4%) were of mixed miasmatic condition and sycotic miasm was found in only 06 (1.4%) patients.

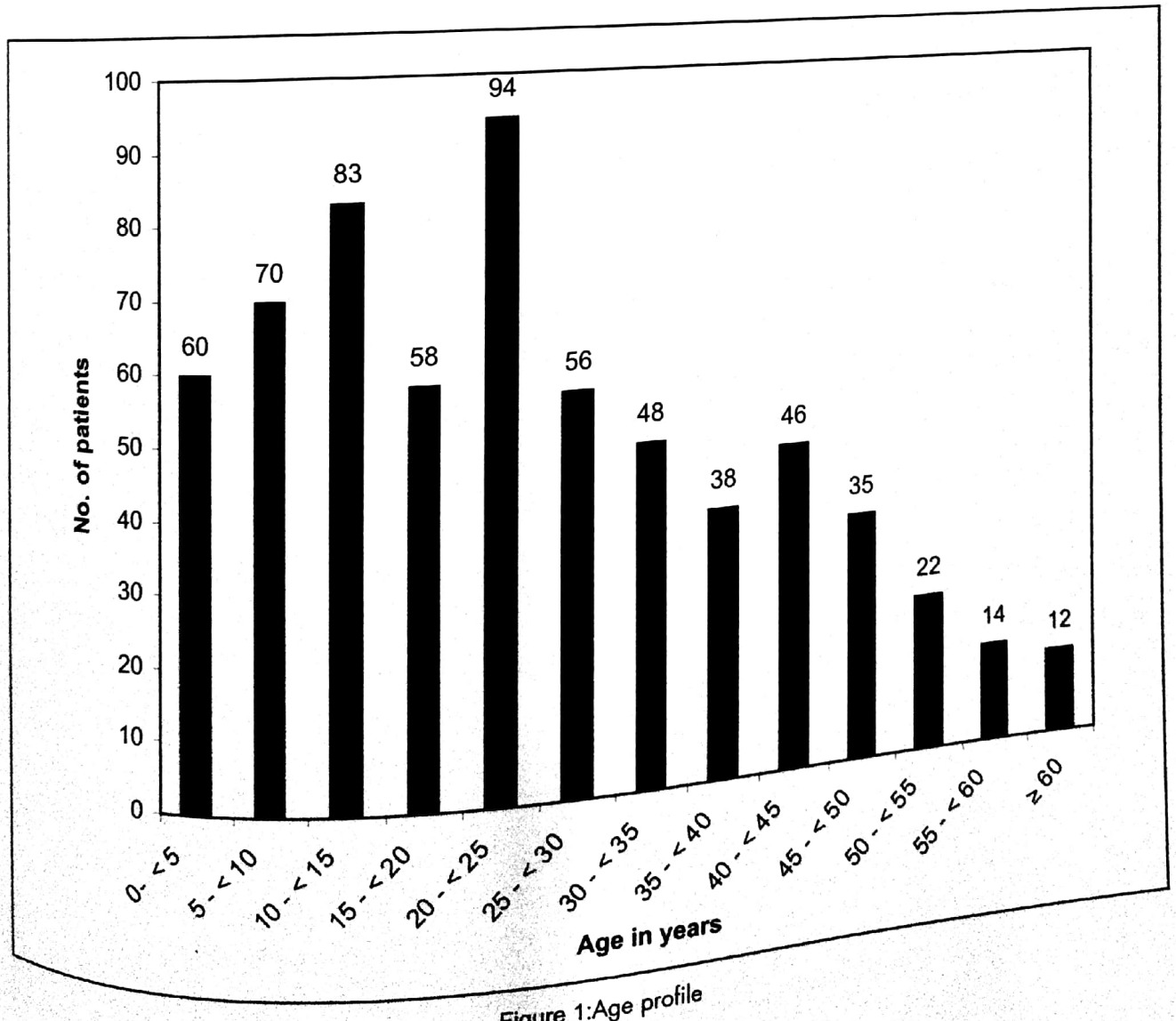

Figure 1:Age profile

Results

Out of 636 patients enrolled, 546 patients who were followed up were included for the evaluation; 90 patients were dropped out. The studied sample consisted of 292(53.4%) males and 254 (46.5%) females.

Paroxysm of acute manifestation in form of frequency, duration and intensity of attack could be assessed in the study centre at CRI, Kottayam only. It was observed that 90% of 11 patients improved who were having their epileptic attack once daily. Similarly 64 patients who suffered once in 3 months, 83.11% improved. 71% of the patients having an attack of once daily to once in three months were improved in their attacks (Table 1).

Response to homoeopathic medication according to duration of epileptic attack was also observed. Out of 183 patients with duration of epileptic attack between one minute to three minutes, 77 (66.12%) improved; epileptic attack ranging from three minutes and above was observed in 119 patients out of which 81 (68.06%) improved. In 106 patients the period of attack ranged from 30 seconds to less than one minute, out of which 77 (72.64%) improved; status epilepticus was observed in 9 patients, among which 6 improved and in 5 patients the duration of attack was irregular out of which 3 (60%) responded to homoeopathic medication.

60% (n=116) patients suffering from epileptic attacks of mild intensity improved with homoeopathic medication. Similarly in patients with epileptic attacks of moderate and severe intensity, improvement was seen in 67.56% and 64.44% respectively.

Presenting complaints were taken up as basis of selection of medicines in maximum number of patients (n=219) and positive response was observed in 201 (91.7%) patients. Prescriptions were made on other aspects too i.e. *miasmatic* background, generalities, constitutional features, repertorial totality etc. (Table 2).

Duration of treatment and the improvement status were also studied (Table 3 & 4). Epileptic patients need long duration of treatment and long term follow up. Out of 546 patients who were followed up, 15 (2.74%) patients were cured, 498 (91.2%) showed improvement in varying degrees, *viz.* marked improvement in 116 (21.2%) patients, moderate improvement in 178 (32.6%) patients, mild improvement in 204 (37.3%) patients, no improvement in 32 (5.8%) patients and only one patient became worse (Table 4).

Table 1: Frequency of attacks

Groups	No. of patients		
	Before treatment	Improved	Did not improve
Once daily	11	10 (90.9%)	1(9.1%)
Once in a week	31	26 (83.87%)	5(16.12%)
Once in a month	92	79 (85.86%)	13 (14.13%)
Twice in a month	67	57 (85.07%)	10 (14.92%)
Once in two months	41	33 (80.48%)	8 (19.51%)
Once in 3 months	77	64 (83.11%)	13 (16.88%)
Once in 6 months	1	0	1 (100%)
Once in a year	24	19 (79.16%)	5 (20.83%)
New moon and full moon	15	13 (86.66%)	2 (13.33%)
Status epilepticus	9	8 (88.88%)	1(11.11%)
Irregular	50	42 (84%)	8 (16%)
Many times a day	4	3 (75%)	1 (25%)
Total	422	354	68

Epileptic disorders present with episodes of sensory, motor or autonomic disturbances with or without loss of consciousness. This study details various types of subjective and objective symptoms presented by the patients. Subjective symptoms like weakness and prostration after the attack was most common (287 patients), while sense of insecurity was least (12 patients) observed (Table 5). Objective symptoms, viz. epileptic cry, convulsions, loss of consciousness, tongue biting, involuntary passage of urine and stool, behavioural changes, falling down and vomiting were seen in the patients presenting with epilepsy. Out of these, convulsions were found in maximum (410) patients, while behavioural changes were found in only 56 patients (Table 6). Some pathological investigations were also carried out to determine any correlation of these findings to epilepsy (Table 7).

Table 2: Basis of prescription

Basis of prescription	Total no. of patients	
	Prescribed	Improved
Causation		
– Predisposing factors	46	33
– Precipitating factors	36	33
– Miasmatic	30	21
Generalities	82	61
Modalities	37	25
Presenting complaints	219	201
Constitutional features	48	43
Repertorial totality	82	58
Others	56	38

Table 3: Duration of treatment

Groups	No. of patients	
	Studied	Improved
1 day - < 15 days	8	0
15 days - < 1 month	29	26
1 month - < 2 months	100	87
2 months - < 3 months	33	29
3 months - < 6 months	64	55
6 months - < 9 months	55	52
9 months - < 12 months	51	45
12 months - < 18 months	48	41
18 months - < 24 months	47	38
24 months - < 30 months	33	29
30 months - < 36 months	28	22
36 months - < 60 months	126	73
> 60 months	19	16

The various homoeopathic medicines which were used in this long term observational study were enlisted in Table 8. Out of these, the medicines which were commonly indicated and also found useful were *Agaricus muscarius* (80.95% of 21), *Belladonna* (96.67% of 30), *Cicuta virosa*, (86.36% of 22), *Cina*, (76% of 25), *Cuprum metallicum*, (91.91% of 138), *Gelsemium*, (75.86% of 58) and *Natrum muriaticum*, (75% of 16).

Discussion

Epilepsy is one of the most common serious neurological disorders and also one of the world's most prevalent non-communicable diseases, people with epilepsy continue to be stigmatized and have a lower quality of life than people with other chronic illnesses[33]. This prospective observational study suggests a positive role of homoeopathic medicines in the management of patients suffering from epilepsy.

Age-specific prevalence rates were higher in the younger age group[35], childhood epilepsy is among the most prevalent and therefore important neurological conditions in the developing years[35, 36]. Population based studies report prevalence rates of 3.6 to 4.2 per 1000 for children in developed countries and approximately

Table 4: Improvement status

Improvement status	No. of patients		
	Male	Female	Total
Cured	09	06	15 (2.74%)
Marked improvement	59	57	116 (21.24%)
Moderate improvement	104	74	178 (32.6%)
Mild improvement	98	106	204 (37.3%)
No improvement	21	11	32 (5.86%)
Worse	01	00	01 (0.18%)
Total	292	254	546

Table 5: Response to treatment (subjective symptoms)*

Subjective symptoms	No. of patients		
	Before treatment	Improved after treatment	Did not improve after treatment
Weakness and prostration	287	219 (76.30%)	68 (23.69%)
Headache	208	143 (68.75%)	65 (31.25%)
Numbness of head	122	89 (72.95%)	33 (27.05%)
Fear	142	100 (70.42%)	42 (29.57%)
Tremor	051	37 (72.55%)	14 (27.45%)
Twitching of eye lids	044	32 (72.72%)	12 (27.27%)
Visual hallucination	023	15 (65.21%)	08 (34.78%)
Sense of insecurity	012	8 (66.66%)	04 (33.33%)
Loss of appetite	013	9 (69.23%)	04 (30.77%)
Sleeplessness	072	60 (83.33%)	12 (16.67%)
Vomiting	93	65 (69.89%)	28 (30.10%)
Involuntary passage of urine & stool	61	47 (77.04%)	14 (22.95%)

The data relates to CRI, Kottayam only

Table 6: Response to treatment (objective symptoms)*

Objective symptoms	No. of patients		
	Before treatment	Improved after treatment	Did not improve after treatment
Epileptic cry	135	98 (72.59%)	37 (27.41%)
Convulsions	410	171 (41.70%)	239 (58.29%)
Loss of consciousness	351	249 (70.94%)	102 (29.06%)
Tongue biting	108	84 (77.77%)	24 (22.22%)
Behavioral changes	56	39 (69.64%)	17 (30.35%)
Falling down	84	60 (71.42%)	24 (28.57%)

* *The data relates to CRI, Kottayam only*

double these rates in developing countries. In this study patients suffering from epilepsy in the age group of less than 5 – 15 years were 213 (33.5%) and between 15 to less than 30 years were 208 (32.7%) which shows that it is common in younger age groups. Thus the findings in this study (Figure 1) corroborate with the findings of Sridharan and Murthy[34].

In this study, seizure types were classified basing on presentation of clinical symptoms without EEG investigation. Out of 636 patients suffering from epilepsy, grand mal was the commonest clinical type whereas febrile epilepsy was observed in only 3.5% patients. This shows that the percentage of febrile convulsions is very less in comparison with other clinical types which corroborates with findings of Verity and Golding[37], these authors are of the view that febrile convulsions causing epilepsy is a rare occurrence.

The various factors which predisposed epilepsy were hereditary, developmental defects, difficult labor and trauma; these findings substantiate the various etiological factors mentioned in 'Atlas epilepsy care in the world' 2005 by the World Health Organization'[38]. The miasmatic analysis suggests that *psoric miasm*[39] was dominant in most of the patients.

Table 7: Pathological findings*

	No. of patients		
	Before treatment	Improved after treatment	Did not improve after treatment
Blood			
- Leucocytes increased	02	02	00
- Eosinophils increased	48	39	09
- Lymphocytosis	18	14	04
- E.S.R. increased	61	54	07
- Blood Sugar (random) increased	04	03	01
Urine			
- Albumin +ve	20	16	04
- Sugar +ve	10	6	04
- Pus cells +ve	21	17	04
- RBC +ve	01	01	00

* This data relates to CRI, Kottayam only.

Table 8: Medicines prescribed and found useful along with their prescribing indications

Name of the medicine with potencies	No. of patients		% of patients improved	Indications
	Prescribed	Found useful		
Agaricus muscarius 30,200	21	17	80.95	• Anxious • Patient feels as if drunken. • Chilly patient. • Epileptic convulsions. • Involuntary trembling of left upper limb & right lower limb. • Twitching of muscles of body.
Arsenic album 30,200, 1M, 10M	7	5	71.43	• Convulsions caused by alcoholism, chewing tobacco, stale food. • Restlessness. Generalized convulsions with behavioural problems. • Chilly patient. • Craves hot foods and drinks. • Aura starts as drawing pain in limbs. • Involuntary urination. • Vertigo and intense aching pain in occiput. • Convulsions followed by stupor. • Partial paralysis of lower extremities. • Complaints return annually.
Argentum nitricum 30, 200	6	4	66.67	• Nocturnal epilepsy followed by debility for several days. • Gloomy, dull, wishes to do nothing, fear of an attack.

Table 8: *(Contd.)*

Name of the medicine with potencies	No. of patients		% of patients improved	Indications
	Prescribed	Found useful		
				• Restless and tremulous before the attacks. • Suddenly waking up from sleep with convulsion preceded by cry. • Epileptic attack caused by fright.
Baryta carbonica 30,200,1M	9	7	77.78	• Convulsion in retarded children. • Dizziness before an attack. • Clonic convulsions with frothy discharge from mouth.
Belladonna 30,200,1M	30	29	96.67	• Febrile convulsions. Convulsions during dentition with flushes of heat and hot head. • Irritable, bites people before an attack of epilepsy. • Irritable and restless after convulsion. • Epileptic convulsions starting from arms. • Throbbing pain in head.
Bufo rana 200,1M	12	8	66.67	• Convulsion / seizures occurring during sleep. • Aura begins in abdomen. • Clonic convulsions followed by vertigo.
Calcarea carbonica 30,200,1 M	56	38	67.86	• Large bellied children. • Convulsions from becoming wet, epileptic attacks from fright. • Patient becomes irritable, quarrelsome and loquacious. • Convulsions with froth at mouth. • Aversion to milk, craving for boiled eggs. Involuntary urination. • Profuse sweat on head during sleep and epileptic attack. • Feet cold and clammy. • Attack begins with headache.
Causticum 30, 200, 1 M	12	8	66.67	• Convulsion from suppressed eruption, during new moon. • Numbness of extremities. • Convulsions with falling and involuntary urination, head drawn to one side. • Convulsion, right side, drowsy after convulsion.
Cicuta virosa 30,200,1M	22	19	86.36	• Convulsions spread from above downwards. • Convulsions violent. • Involuntary urination. • Froth at mouth, bites tongue. • Tingling and numbness from above downward. • Twitching of face, head turns to one side.
Cina 200, 1M	25	19	76	• Convulsions associated with worm infestations. • Child screams during sleep. • Convulsions worse at night. • Twitching and jerking of extremities.

Table 8: *(Contd.)*

Name of the medicine with potencies	No. of patients		% of patients improved	Indications
	Prescribed	Found useful		
Cocculus indicus 30	7	5	71.43	• Convulsive movements in different parts, convulsion of hands during attack. • Momentary loss of consciousness. • Spasmodic yawning. • Twitching of hands < early morning.
Cuprum metallicum 30, 200,1M	136	125	91.91	• Cries before attack; suffocation, cramps in legs, severe headache and vomiting after convulsions, jerking and twitching of muscles.
Gelsemium 200, 1M	58	44	75.86	• Generalized seizures with vertigo and numbness of head. • Blurring of vision, heaviness of head and dizziness. • Complaints with trembling of body tendency to fall often.
Hyoscyamus 200, 1M, 10M	8	6	75	• Convulsion during sleep. • Protruding and staring eyes. • Discharge of urine and spasmodic closure of eyes during attack.
Ignatia 200, 1M	10	7	70	• Convulsive twitching, especially after fright or grief, due to disappointed love, from mental worry, hysterical convulsions from emotional stress. • Convulsion alternating with oppressed breathing.
Lachesis 30, 200, 1M	14	10	71.43	• Vertigo before convulsions. • Religious and loquacious patient. • Unconscious with convulsions. • Grinding of teeth and frothy saliva from mouth during attack. • Anxiety before attack, creeping sensations from nape of neck down the spinal column. • Aggravation during sleep.
Natrum muriaticum 30,200,1M	16	12	75	• Broods over his complaints. • Desires salty food. • Headache < sun heat. • Convulsions epileptic, tonic, clonic. • Epileptic cry, bites tongue; aggravation from exposure to heat of sun.
Natrum sulph. 200,1M	10	3	30	• Convulsions, epileptic. • *History of* difficult labor, causing injuries predisposing to convulsive attacks.
Nux vomica 30,200,1 M	11	8	72.72	• Epilepsy after masturbation and excessive sexual indulgence. • Rich diet and smoking aggravates. • Persistent bowel complaint.

Table 8: *(Contd.)*

Name of the medicine with potencies	No. of patients		% of patients improved	Indications
	Prescribed	Found useful		
Opium 30,200	13	10	76.92	• Convulsions after fright, at the sight of snake, during sleep. • Convulsions with sudden cry.
Phosphorus 30, 200, 1M, 10M	20	14	70	• Epilepsy due to anger, grief, irritation of spinal cord. • Lascivious thoughts, sensitive to smell. • Desires cold food, icy cold drinks. • Roaring in the ears, impaired hearing. • Petit mal epilepsy starts with visual hallucination of snake. • Violent frontal headache after attack. • Convulsions with consciousness.
Pulsatilla 30,200, 1 M,10M	25	22	88	• Complaints from suppressed menses, from emotions predominantly in a happy situation. • Weeping disposition, yielding, mild, tearful, Changeable mood, indifferent to household affairs • Convulsions with froth at mouth. • Disposition to vomit and eructations. • Petit mal epilepsy with tendency to weep and laugh after convulsions
Sepia 30, 200,1M	5	4	80	• Indifferent, aversion to spouse, loved ones and to own occupation, easily offended, dreads to be alone. • Sensation of something rolling around the head. • Coldness of vertex.
Stramonium 30, 200,1M	18	15	83.33	• Epilepsy from fright, with loquacity and changeable mood. • Biting tongue. • Body very hot. • Trembling, twitching, violent convulsions involving every muscle. Convulsions with sudden scream.
Sulphur 30, 200, 1 M, 10M	58	52	80.95	• Obstinate, irritable and philosophical. Aversion to business, lazy, depressed difficulty in thinking, disobedient. • Desires sweets. • Aura begins in arms. • Convulsions with unconsciousness. • Sensation of heat at vertex. • Heaviness and fullness of head. • Spasms start with twitching of hands. Convulsions with constipation and headache. • Generalized convulsions at night.
Tuberculinum 200,1 M, 10M	4	3	71.42	• Tubercular diathesis or family history of tuberculosis. • Catches cold easily, on least exposure. • Hyperactive.

Frequent recurrence of epilepsy definitely has impact on quality of life of both children and adults causing stress in families, behavioural issues and cognitive functioning[40, 41, 42]. Homoeopathic treatment could very well reduce these three aspects with no side effects.

This study identifies a group of medicines with their indications, which were found to be useful in epilepsy. The symptomatic indications of these medicines are mentioned in Table 8.

Cuprum metallicum[30] *(n=125)* was indicated in maximum patients. This confirms to the observation of Dr. Kent, "It is pre-eminently a convulsive remedy. The convulsive tendency associated with almost every complaint that Cuprum creates and cures. It has convulsions in every degree of violence from the mere twitching of little muscles and of single muscles to convulsions of all the muscles. The earliest threatening are drawings in the fingers, clenching of the thumbs or twitching of the muscles. Tonic contractions, the limbs being drawn up with great violence and it seems as if the frame would be torn to pieces by the violent contractions of the muscles every where"[43]. *Calc.carb.* was found to be useful in 38 patients; cure of epilepsy with this medicine has also been cited by Boenninghausen while treating 40 patients[27].

The symptom, trembling of left upper limb and right lower limb in *Agaricus muscarius* was reverified[44]. Other associated symptoms were twitching of muscles of body. Along with this the patients were mentally anxious, suspicious and needed sympathy.

Belladonna was indicated for the patients having febrile convulsions with flushed and hot head; irritable and biting people around during epilepsy; epileptic convulsions starting from arms responded well to this medicine. The 'violence' nature of this medicine was reverified as mentioned by Boericke[45].

Cicuta virosa is another medicine which was found to show positive results in epileptic patients. Violent convulsions, spreading from above downward were the indicated symptoms.

91.91% of patients who were prescribed *Cuprum met.* showed improvement of the symptoms: cries before attack, suffocation, cramps in legs, severe headache and vomiting after convulsions, jerking and twitching of muscles.

Cina was found to be helpful when the convulsions were associated with worm infestation of children. The epileptic attacks worsened at night[44].

Gelsemium helped the epileptics presenting with symptoms of vertigo, heaviness of head, blurring of vision, which were associated with epilepsy.

Natrum muriaticum was helpful when the epileptic patients had the constitutional symptoms like brooding over the complaints, desire for salty food and headache aggravated from exposure to heat of sun.

The primary objectives to identify a group of useful medicines and their reliable indications were achieved by re-confirmation and re-verification of indicated symptoms in a number of patients. However, the other objectives, which include relationship between different medicines and repetition, could not be achieved.

This study had limitations too. All the patients registered were purely on the basis of signs and symptoms. Due to lack of facilities, EEG, CT scan or MRI could not be done.

Conclusion

The results indicate a positive role of homoeopathic medicines in the management of epilepsy. A multicentric trial with definitive qualitative and quantitative parameters, laboratory based diagnosis and the evaluation of the patients on those parameters is proposed to further substantiate the outcome of this study.

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