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# Study on the Effect of Kushmanda Ghrita in Apasmara

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**ABSTRACT:**
Epilepsy may be defined as a disorder of brain expressed as a paroxysmal cerebral dysrhythmia. The dysrhythemia is symptomatic and is associated with seizures ("seizure" is defined as excessive, sudden, disorderly, synchronous discharges of cortical neurons with spread to surrounding tissues may result in motor, sensory or psychic abnormalities). The clinical features of seizures vary depending upon the brain site affected and the rate, pattern and spread of the abnormal electric discharge. At the helm of affairs, stands the ambiguity regarding the aetiology, pathogenesis and the therapy. Though allied science claims of many innovations opening new horizon in the field of research, comprehensive knowledge regarding epilepsy is still in its infancy. Kushmanda Ghrita in the form of Shamana Sneha was effective on different stages of epilepsy. It showed better improvement in the features of the ictal stage. The severity, frequency and duration of attack were reduced considerably after the course of treatment.

**Keywords:**
Epilepsy, Kushmanda Ghrita, Consciousness, Cognitive Abilities

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## INTRODUCTION

Epilepsy is considered a dreadful and devastating disease with an incidence of 5-10 per every 1000 persons. It has the dubious distinction of affecting all the walks of life of an individual suffering from the disease. The word Epilepsy was used to denote both the disease and the single attack in the past. The drug, Kushmanda Ghrita is one of the simple formulations described in the page of various Ayurvedic texts like Astanga Hridaya, Yogaratnakara etc, which fulfills all the criteria of principles of treatment of epilepsy.

Though Shodhana is the first line of treatment, but as most of the patients approaching for Ayurvedic treatment may be on various anti-epileptic drugs. Hence it was decided to manage the conditions with Shamana mode of administration which are indicated in the management of epilepsy. A person with epilepsy will have seizure. A seizure is a transient paroxysmal pathophysiological disturbance of cerebral function caused by a spontaneous, excessive discharge of neurons. Patients are said to have epilepsy if they have a

chronic condition characterized by a recurrent seizure.

The ictus, or ictal event, is the seizure itself. The nonictal periods are categorized as preictal, postictal, and interictal. The symptoms during the ictal events are determined primarily by the site of origin in the brain for the seizure and by the pattern if the spread of seizure activity through the brain. Interictal symptoms are influenced by the ictal event and other neuropsychiatric and psychosocial factors, such as coexisting psychiatric or neurological disorders, the presence of psychosocial stressors, and premorbid personality traits. Also these patients experience various symptoms like perictal symptoms, ictal symptoms, and interictal symptoms like personality disturbances, psychotic symptoms, violence, mood disorder symptoms etc.

A correct diagnosis of epilepsy can be particularly difficult when the ictal and interictal symptoms of epilepsy are severe manifestations of psychiatric symptoms in the absence of significant changes in consciousness and cognitive abilities. Therefore, psychiatrists must maintain a high level of suspicion during the evaluation of a new patient and must consider the possibility of an epileptic disorder, even in the absence of the classic signs and symptoms. Another differential diagnosis to consider is pseudo seizure, in which a patient has some conscious control over mimicking the symptoms of a seizure. Along with primary symptoms an EEG can be taken to conform the disease.

Ayurvedic treatment of epilepsy is one of the prominent one and it is of two type Vega Kailna Chikilsa and Vegantara Kala chikilsa. The first one deals with treatment during the attack and the later deals with treatment in between the attacks. This study was taken to analyse the role of Kushmanda Ghritain the management of Apasmara as Shamana Sneha form. Chakrapanidatta and Arunadatta in their commentaries on Charaka Samhita and Astanga Hridaya respectively have made a very significant observation regarding the mode of action of Shamana Sneha. Acharya Charaka has made a pertinent note on the effect of Shamana Sneha thus:

"Doshanukarshini Matra Sarvamarganusarini,
Balya Punarnavakari Shareerendriya Chetasam",

Shamana Sneha if properly administered alleviates all the ailments instantaneously. It removes the Doshas, pervades all the system of the body, strengthens and rejuvenates the body, sense organs and mind. In this study an attempt is made to understand the effect of a combination of Ayurvedic medicines called kushmanda ghrita upon epilepsy. Kushmanda Ghrita is considered as Medhya and indicated specially in the treatment of Apasmara (Shetty, A., 1991). It consists of Kushmanda, Yastimadhu, and Purana Ghrita. It have the qualities like Vedanasthapaka, Vishagna, Medhya, Akshepakahara, Swedajanana, Rasanaya, Jivaneeya, Nadibalya, Shonithasthapana, Balya, Deepana,Medhya, Smrtivardhaka, DhatuPoshaka, Unmada, Apasmara, Mada, Murcha.

## MATERIALS AND METHODS

Kushmanda Ghrita was prepared in the laboratory using the following ingredients. Kushmanda - 180lts, Yastimadhu - 1kg, Purana Ghritha- 10 kgs. 10 kgs of Purana Ghrita was taken and heated in Mandagni till it completely liquifies (Sutaria, B.N., 1988). Later 180 lts of Kushmanda Swarasa and 1 kg of Yastimadhu Kalka were added. Snehapaka was continued till Phena Shanti (subsidence of foam). Sneha of Madhyama Paka was prepared. Tests of Sneha Siddha Lakshana were performed. For that atients were selected randomly; it was an observational study with pre-test and post-test design

Patients were assigned into single group consisting of 15 numbers then each patient was given 20ml of Kushmanda Ghrita in morning in the empty stomach, 20ml in the evening before meals for 3 months and were followed for 6 months. Standard epilepsy scoring pattern and self-graded symptomatic scoring for epilepsy was adopted for statistical analysis. The data obtained was statistical analyzed by paired T-test.

## OBSERVATIONS AND RESULTS

The major observations of the experiment conducted was that Kushmanda Ghrita provided 76% of improvement in severity of attack, 74% in the frequency of attack, 75% in the duration of attack and all are statistically highly significant(Fig. 1). Along with that Pre ictal and post ictal features are improved 73% and 67% respectively which are also statistically significant, though the higher mental functions were impaired in less number of patients but Kushmanda Ghrita provided 100% improvement (Thesia M.H, 1992).

Among the types of Epilepsy, Kushmanda Ghrita proved better in the management of Vataja and Pittaja Epilepsy. These were the observations of the experiment conducted to understand effect of Kushmanda Ghrita upon Epilepsy or Apasmara (Pandya M.B., 1962).

## DISCUSSION

Kushmanda Ghrita is administered in the form of Shamana Sneha in Epilepsy patients for 3 months. As this is the time bound study, the observation of the patients was made for 6 months, including treatment days and follow up.

**Effect on severity of attack**: The initial mean score 2.27 was reduced to 1.06 after the 3months treatment with 53% improvement which was statistically highly significant (P <0.001). During follow up study, in the first follow up the severity of attack was reduced to 0.53 with 76% improvement which was statistically significant (P<0.01) In the second follow up, that was further reduced to 0.4 with 82% improvement which was statistically highly significant (P<0.001).In the third follow up, the mean score increased to 0.53 with a slight decrease in percentage of improvement (76%) which was also statistically highly significant (P<0.001) as shown in Table 1.

**Table 1: Effect of Kushmanda Ghrita on severity of the attack**

| FU | BT | AT | % | SD | SE | t | P |
|---|---|---|---|---|---|---|---|
| **IMAT** | 2.27 | 1.06 | 53% | 0.541 | 0.139 | 8.633 | <0.001 |
| **FU I** | 2.27 | 0.53 | 76% | 2.995. | 0.5465 | 2.927 | <0.01 |
| **FUII** | 2.27 | 0.4 | 82% | 0.793 | 0.2050 | 8.097 | <0.001 |
| **FUIII** | 2.27 | 0.53 | 76% | 0.7148 | 0.1847 | 8.299 | <0.001 |

**Frequency of attack**: The initial mean score 2.066 was reduced to 1.13 after the 3months treatment with 45% improvement which was statistically significant (P <0. 01). During first follow up study, the frequency of attack was reduced to 0.33 with 83% improvement which was statistically highly significant (P<0.001).In the second follow up, that was further reduced to 0.2 with 80% improvement which was statistically significant (P<0.01).In the third follow up, the mean score increased to 0.53 with a slight decrease in percentage of improvement is 74% which was statistically highly significant (P<0.001) as shown in Table 2.

**Table 2: Effect of Kushmanda Ghrita on frequency of attacks**

| FU | BT | AT | % | SD | SE | t | P |
|---|---|---|---|---|---|---|---|
| **IMAT** | 2.066 | 1.133 | 45% | 1.797 | 0.464 | 2.297 | <0.01 |
| **FUI** | 2.066 | 0.333 | 83% | 0.679 | 0.175 | 9.880 | <0.001 |
| **FUII** | 2.066 | 0.2 | 80% | 2.976 | 0.769 | 2.253 | <0.01 |
| **FUIII** | 2.066 | 0.533 | 74% | 0.498 | 0.128 | 11.406 | <0.001 |

**Duration of attack**: The initial mean score 2.67 was reduced to 1 after the 3months treatment with 62% improvement which was statistically significant (P <0. 01). During the first follow up study, the initial mean score of the symptom was reduced 0.53.The improvement was 80% and statistically highly significant (P<0.001). In the second follow up, the improvement remained same. In the third follow up, the mean score increased to 0.66 with a slight decrease in percentage of improvement that is 75% which was also statistically highly significant (P<0.001) as shown in Table 3.

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**Table 3: Effect of Kushmanda Ghrita on duration of the attacks**

| FU | BT | AT | % | SD | SE | t | P |
|---|---|---|---|---|---|---|---|
| **IMAT** | 2.67 | 1. | 62% | 1.676 | 0.433 | 3.747 | <0.01 |
| **FUI** | 2.67 | 0.533 | 80% | 0.956 | 0.247 | 45.382 | <0.001 |
| **FUII** | 2.67 | 0.533 | 80% | 1.146 | 0.296 | 7.206 | <0.001 |
| **FUIII** | 2.67 | 0.667 | 75% | 1.512 | 0.390 | 5.297 | <0.001 |

**Higher mental functions**: The initial mean score 1 was reduced to 0.46 after the 3months treatment with 42% improvement which was statistically insignificant (P >0.05). During the first follow up study, in the functional capacity of higher mental functions 75% improvement, in the second and third follow up 100% improvement was noted, but all these are statistically insignificant (P>0.05) as shown in Table 4.

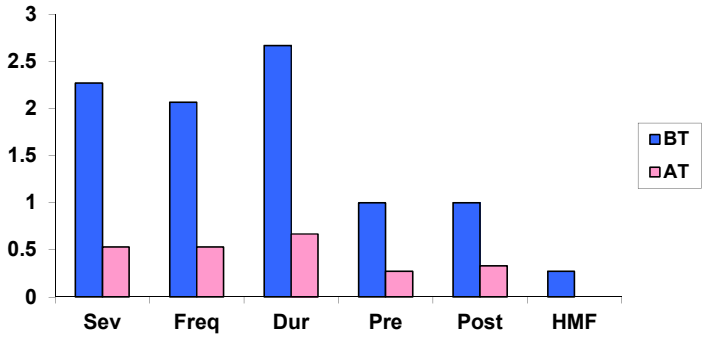
**Table 4: Effect of Kushmanda Ghrita on higher mental functions**

| FU | BT | AT | % | SD | SE | t | P |
|---|---|---|---|---|---|---|---|
| **IM AT** | 0.266 | 0.46 | 42% | 0.339 | 0.0875 | 1.532 | >0.05 |
| **FU I** | 0.266 | 0.066 | 75% | 0.541 | 0.139 | 1.0438 | >0.05 |
| **FU II** | 0.266 | 0. | 100% | 0.5728 | 0.148 | 1.797 | >0.05 |
| **FUIII** | 0.266 | 0. | 100% | 0.5728 | 0.148 | 1.797 | >0.05 |

**Overall effect of the therapies**: Kushmanda Ghrita used in the form of Shamana Sneha provided marked improvement in 20% of the patients, moderate improvement in 47%, Mild Improvement in 20%, but condition of 13% of patient remained unchanged.

Though Kushmanda Ghritashowed good improvement in most of the patients, but the final conclusion could not be drawn, as treatment of chronic patients of Epilepsy for 3 months may not be sufficient to revert the disease (Nagarajan C., 1991). More over some of the patients got the recurrence of the attack after the stoppage of the treatment, which suggests that duration of the treatment with the Ghrita should be prolonged in most of the cases.

A Follow up study was conducted along with this where all the patients were given the prescribed medicines for 3 months and after stopping the drugs, the patients were followed up every month for 3 months to note the improvement and recurrence. Among the treated patients, 25% of patients suffered the attack after the stoppage of treatment during the follow up. The reason may be that the effect of Ghrita lasts longer as compared to chemical medicine (Satyanarayana U., 2000). This is being a time bound study; the duration of medicines depending on the response of the patient could not be altered which gives a further scope to this research.




Sev – Severity of attack
Freq – Frequency of attack
Dur – Duration of attack
Pre – Pre ictal features
Post – Post ictal features
HMF – Higher mental functions

**Figure 1: Overall effect on the signs and symptoms of Apasmara 15 Patients**

Through the whole study we came to an inference that effect of Kushmanda Ghrita on apasmara is positively influential. From this study its clearly understood that Kushmanda Ghrita used in the form of Shamana Sneha provided marked improvement in 20% of the patients, moderate improvement in 47%, Mild Improvement in 20%, but condition of 13% of patient remained unchanged. Though Kushmanda Ghritashowed good improvement in most of the patients, but the final conclusion could not be drawn, as treatment of chronic patients of Epilepsy for 3 months may not be sufficient to revert the disease.

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