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Preliminary quantitative and qualitative analysis of Sadamanjil chooranam

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Abstract

Sadamanjil chooranam is one among the known siddha herbal formulation to cure insomnia. The key main ingredient are sadamanjil (valaerian root) and kada kasa (white poppy seeds) It is indicated for insomnia (thookaminmai.nithirai inmai) and mood Associated disorder. standardization of traditional siddha practices and formulations is a mandatory as per who. screening is prerequisite to find out the novel principle of this medicine. The present study is to establish and to reveal the presence of active principle an amino acid.

Keywords: Siddha medicine, Sadamanjil chooranam. insomnia. thookaminmai. Kasa kasa (poppy seeds) sadamanjil, valaerian root.

Introduction

Siddha medicine is an indigenous medicine followed by ancient Tamil people blended with abundance of pharmacological treasures in variably use plant mineral mineraloid, animal and biological products.

Siddha system of medicine clearly state that nithirai (sleep) vegangal is an natural (biological phenomenon it should not be controlled if it Is controlled it Leads to other disease(head ache, pain behind the eyes, loss of orientation, slurring of speech .

Insomnia is one of the major common symptoms usually missed by physician About 33 % of adult population with increasing age, diabetes associated are significantly suffered which over wheleming to urbanization and modified life styles. Female, increasing age, depression, economical inability, familial related issues male and female separation, are the commonest risk factors.

It Leads to paramount feature which include fatigue, impaired ability of reading, copying text, irritability while doing any task, poor quality of life and may progress to depression, Anxiety behavioural disorder, cognitive disability studies have shown now a days. Strong association in triggering motor vehicle accident, apparent risk of mortality too. It often occur a prime symptoms of depression, mood associated bipolar disorder and may be a manifestation and comorbid conditions of chest pain, cancer, heart disease, asthma, gastro esophageal disease, over active thyroid, parkinsonism, nasal sinusitis, asthma, skin disease.

Our medicine works, based on several principles especially potency of the medicine, elemental composition, taste. This factors made an impact of vadha, pitha, kabha. Modality of the medicine, dosage, adjuvant also intervene the bioavailability of the medicine To produce a pronounced therapeutic effect

Lots of crude drug Opium (abin) *Withania somnifera* (Amukkara) *Cannabis sativa* (Kanja) *Solanum melongena* (Kathiri) aril of *Myristica fragrans* (Jathipathiri) *Hyosyamus niger* (Kurosanni omum) *Ophiorhiza mungos* (Keeripurandan) seeds of *Argemone mexicanna* (Kudiootu poondu) extensively used as hypnotic and sudorific in action, lots of poly herbal, herbomineral formulation, medicated oil are used as internal as well as external to alleviate and to manage insomnia among this sadamanjil is chooranam is (commonly practiced) formula is a simple, feasible, low cost with effective without addictive tendency.

Sadamanjil

Botanical name:

Nardostachy sadamansi belongs to family Valerinaceae.

Other siddha vernacular names paisasi, chedilai, poothsesini.

It posses pungent and sweet taste with hot potency. the main actions are nutritive, antispasmodic, diuretic, expectorant it is used for a long run treating the spider poison, pyrexia of unknown etiology, to harmonize aggravate pitham, to expel vayu (abanan) diarrhoea, eye disease, epilepsy, bleeding diatheses, asthma, eclampsia. It is a ingredient of lagusanthanathi Thailam, inch chooranam, nandimazhugu, mayanathailam, jothi thylam, thalisathichooranam, moothanda lehiyum, maha elathy lehiyam.

Kasa kasa

Botanical name:

Papaver somnifer belongs to papaveraceae

Other names: Posthakkai

It Posses a sweet taste, hot potency demulent, nutritive, analgesic, tranqulizer, anodyne are the prime actions. It is used to treat spermatorhoea, dysentery, skin disease, neurological disease, General weakness, removes intestinal worms it is. key ingredient in electuries (lehiyum) kasakasalehiyum, moothanda lehiyum, venthya lehiyum, vilva lehiyum other formulations mega virana kalimbu, nandimezhugu.

Materials and Methods

Ingredient of Sadamanjil chooranam

1. Sadamanji root
2. Kasa kasa seed

Dosage: 1- 2 grams BD with Milk

Reference - Gunapadam mooligai vaguppu

Procedure; Qualitative analysis

Carbohydrates (Kokate, 1994**)**

Fehling's Test: 1 ml Fehling's A solution and 1 ml of Fehling's B solution were mixed and boiled for one minute. Then the equal volume of test solution (extract) was added to the above mixture. The solution was heated in boiling water bath for 5-10 minutes. Colour changes is noted Indicates the presence of carbohydrate

Proteins (Ansari, 2006)

Xanthoproteic Test: To the small quantity of extract, 1ml of conc. H_2SO_4 was added, resulted in the formation of white precipitate which on boiling turned yellow. On addition of NH_4OH, yellow precipitate is formed. Indicates the presence of proteins

Glycosides (Ansari, 2006)

Keller-Killiani Test: To 2 ml of the extract, glacial acetic acid, one drop 5% $FeCl_3$ and conc. H_2SO_4 was added. Reddish brown colour appeared at junction of two liquid layers indicating the presence of glycosides.

Steroids (IP, 1996)

Salkowski Test: To 2 ml of extract, 2 ml of chloroform and 2 ml of conc. H_2SO_4 was added. The solution was shaken well. Greenish yellow fluorescence is formed to the chloroform layer presence of steroids.

Flavanoids (Kokate, 1994)

Shinoda Test:

To the extract, 5 ml of 95% ethanol and few drops of concentrated hydrochloric acid was added. To this solution 0.5 gm of magnesium turnings were added. Pink colour is formed indicated the presence of flavanoids.

Tannins (Mukherjee, 2002)

Lead Acetate Test: On addition of lead acetate solution to the extract white colour precipitate is appeared.

Saponin (Ansari, 2006)

Foam Test: Drug extract was shaken vigorously with water. Persistent foam was formed.

Reducing sugar test

Benedict's Test: Equal volume (2ml each) of Benedict's solution and extracts were mixed in a test tube and heated in boiling water bath for 10min the colour changes is noted indicates the presence of reducing sugars.

Phenol test

Ferric chloride Test (Mukherjee, 2002)

To 3 ml of extract, 3 ml of 5% w/v ferric chloride solution was added. Blue – black colour is formed it indicates the presence of phenol.

Quantitative procedure

Quantitative Estimation of Amino acid *(Moore, S., and Stein, W. H.*1948)

Total free amino acid content of freshly collected frozen tissues of algae was estimated by ninhydrin method (Moore and Stein, 1948). To suitable aliquots of the algal extract, water was added to make the total volume to 4.0 mL. To this, 1.0 mL of ninhydrin reagent was added, mixed and kept in a boiling water bath for 15 minutes. The tubes were then removed, cooled and 1.0 mL of 50% ethanol was added. The pink color developed was measured at 550 nm.

Results

Phytochemical components of medicinal drugs;

Amino acid;

Amino acids are organic compounds containing amine and carboxyl functional groups, along with a side chain specific to each amino acid .amino acid based – nutritional supplement, if you are pregnant, breast feeding. If you have allergies to medicines, foods. It is taken by through a feeding tube. It must be mixed with water before take it. store unopened cans of amino acid –based nutritional supplement at room temperature, between 68 and 77 degrees F. once mixed, store amino acid –based nutritional supplement in the refrigerator between 35 and 40 degrees F and use within 24 hours. Do not freeze. Store away from heat, moisture, and light. use opened can contents with in 1 month .

Phytochemical Analysis;

Qualitative Analysis

Test	Result
Carbohydrate	Absent
Reducing sugar	Absent
Protein	Absent
Amino acid	Present
Tannin	Absent
Steroids	Absent
Saponins	Absent
Glycosides	Absent
Flavanoids	Absent
Phenols	Absent

Quantitative Result

Test	Result
Amino acid (µg/ ml)	40 µg/ ml

In conventional research this medicine show only a presence of amino acid.

Discussion

Equal amount of Kasa kasa and Sadamanjil are taken and fried separately and finely grounded by using mortar pestle and sieved, mixed homogenously until a brownish colour powder with faint aromatic is obtained. Which is then subjected to physio chemical analysis.

Conclusion

The results shows only a presence of an amino acid. Sleep induction may be by synergistic action of both drugs by activation of glycine, tryptophan pathway and gaba inhibition on the other hand sweet taste of the medicine normalize the pitha humour and make calming effect to the body to induce sleep and also nourishes the seven udal thathukkal (blood, bones muscles, synovial fluid, bone marrow, sperm, ovum), of our body and normalizes aggravated vatha humour(neurological disease, loss of orientation ,dementia,) and pitha humour(giddiness, burning sensation, restlessness etc], and activates five sense organs and it's function, and the milk adjuvant also have tryptophan promote sleep by reducing pitha humour and then more research should have be performed on this local wisdom remedy to verify the uses in scientific term.

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References

1. The Siddha pharmacopoeia of India. Vol 2, first edition, Govt of India, Ayush
2. The Siddha pharmacopoeia of India .Vol 2, first edition, Govt of India, Ayush
3. Materia Medica vol 1 and 2 by Dr, Nadkarani
4. Mooligai iyal by. Dr. V Arunachalam
5. Gunapadam Mooligai Vaguppu, dr. Murugaesa Mudaliar
6. Agathiyar Guna Vagadam
7. TV Sambasiva Pillai Agarathi
8. Pathartha Guna Sinthamani published by by Ratna Nayakar Sons, Chennai
9. Nam Naatu Vaithiyam
10. Siddha Maruthuva Adippadai Thathuvangalum and Varalarum by Dr.C. S Uthamarayan
11. Noi Anugatha Vithi Ozhukkam by Dr. Durairajan, H.P.I.M, Department of Indian medicine
12. Skm Anubava Vaithiya Muraigal
13. Siddha Vaithiya Thirattu by. Dr. C.S Uthamarayan
14. Theriyar Vanba

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