



SIDDHA SYSTEM OF MEDICINE IN THE MANAGEMENT OF MADATHIYAM (DRUG ABUSE AND DEPENDENCE) – A SINGLE CASE STUDY

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ABSTRACT

The drug abuse symptoms are correlated with *madathiyam (kudiveri noi)*. Drug abuse constitutes physical and psychological symptoms. Most of cough syrup containing antihistamines and codeine is being increasingly noted. The use of antihistamines alone or in combination with other substances of abuse may predispose individuals to develop psychiatric symptoms or syndromes as a part of intoxication, withdrawal or as co-morbid conditions. Present case was carried out in OPD of *Sirappu Maruthuvam* department, National Institute of Siddha, Ayothidass pandithar Hospital, Tambaram Sanatorium, Chennai, Tamil Nadu, India. Here presented a case study reports co-morbid

psychopathology in association with antihistamine abuse and dependence. The case demonstrates the occurrence of psychotic syndromes associated with heavy codeine and pheniramine use. The psychopathology can vary from an independent psychotic syndrome to an organic brain syndrome -like disorder. The patient was assessed by Clinical Opiate Withdrawal Scale (COWS) score and HAM-D scale. The treatment has shown marked improvement in relieving all the symptoms and assessed scales.

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INTRODUCTION

Siddha system is an ancient traditional medical system. As per Siddha text *Nanthesar akalamarana nool* mentioned *MADATHIYAM* is one of the psychiatric condition, due to over consumption of alcohol, opioid drugs or arrack, the ill effects like dizziness, uncoordinated gait, reddishness of face, blurred vision, blabbering of speech, withdrawal symptoms, mental confused and disturbance will be noted. According to modern medicine, it can be correlated with drug abuse symptoms.

Codeine and Antihistamine -containing cough syrups and cough suppressants have been abused for long time in various parts of world, including India. Psychological tolerance and symptoms of physical withdrawal following massive diphenhydramine abuse have documented. The chlorpheniramine induced withdrawal has been reported and is characterised by nausea, tremor, generalized sweating and depression however, pheniramine dependence has not been reported so far, although its abuse has been reported. Use/abuse/dependence of antihistamines or antihistamine contains cough syrups is known to be associated with psychiatric syndromes and disorders. The study about the case abuse and dependence consequent to the prolong intake of *codeine* and *antihistamine containing cough syrup -corex syrup* (codeine 10 mg + chlorpheniramine 4 mg) reported at national institute of siddha outpatient department. Patient was assessed by COWS scale and HAM-D scale. The patient managed with siddha medicine and showed improvement using COWS scale HAM-D scale.

CASE REPORT

A 37 years old male reported at outpatient department National Institute of Siddha with the presented complaints for one year. The patient complained of, increased irritability, sadness of mood, suicidal ideation, decreased interest in work and the surroundings and decreased sleep and appetite. Physical examination and routine investigations revealed no abnormalities except with the presentation of mild hepatomegaly. The mental state examination showed depressed cognition with no abnormalities of speech or perception. He was oriented to time, place and person and had no impairment in judgement or abstraction.

HISTORY OF PAST ILLNESS

Before 8 years, patient was apparently normal. Once in a while he took cough syrup (*codeine, antihistamine containing cough syrup*) for the complaints of cold and cough then he gradually increases the dosage of the drug (*codeine, antihistamine containing cough syrup*) up to 2 bottles per day for three years. At the same time, he was mentally depressed due to some family issues and business loss, he started to consumed a drug up to 4 bottles per day for continually 4 years. While his wife came to know about this few months, she tried to made him withdraw from the drug (*corex cough syrup*), after withdrawn the drug, the patient haven characteristic experiences described below as a sense of euphoria, memory lapses, decreased awareness of the surroundings, persistence of visual scenes beyond the time that they had existed along with suggestive motor incoordination, slurring of speech, ataxia, generalized weakness and lack of strength in the limbs. Those clinical symptoms got worsen day by day.

PERSONAL HISTORY

- Occupation : Supervisor
- Religion : Hindu
- Marital status : Married
- Not a known case of : DM/SHT/BA/PTB/COPD/SEIZURE
- Family History-There is no family history.
- No Previous medication history of other diseases.

ON EXAMINATION

- General condition was fair and afebrile.
- Vitals were normal.
- Cardiovascular system, respiratory system and per abdomen examinations had shown no deformity.
- *Theki* (constitution) was *Vatha piththam*.

ENVAGAI THERVUGAL (EIGHT-FOLD SYSTEM OF CLINICAL ASSESSMENT)

Envagai thervugal (Eight-fold system of clinical assessment) as per Siddha Text-Naadi (Unique Siddha pulse reading method) is not same as the bio medical system. In modern system pulse reading refers to rate, rhythm, volume and special characters, which can be felt by the examining siddha physician.

Table 1: Clinical assessment of siddha system.

Envagai thervukal (Eight-fold system of clinical assessment)		
S.No	Siddha Investigative parameters	
1.	<i>Naa thervu</i> -examination of tongue: (i) <i>Niram</i> (Colour) (ii) <i>Thanmai</i> (Character) (iii) <i>pulan</i> (Sense)	Pale Slightly coated Normal
2.	<i>Niram thervu</i> –examination of colour:	Normal
3.	<i>Mozhi thervu</i> -examination of speech:	Normal
4.	<i>Vizhi thervu</i> - examination of eye: (i) <i>Niram</i> (Colour) (ii) <i>Thanmai</i> (Character) (iii) <i>Pulan</i> (Sense)	Pale Normal Normal Normal
5.	<i>Malam thervu</i> –examination of stool: (i) <i>Niram</i> (Colour) (ii) <i>Nurai</i> (Froth) (iii) <i>Elagal/Erugal</i> (Consistency)	Normal No Constipation
6.	<i>Moothiram thervu</i> – examination of urine: (A) Neerkuri: (i) <i>Niram</i> (Colour) (ii) <i>Adarathi</i> (Specific gravity) (iii) <i>Manam</i> (Odour) (iv) <i>Nurai</i> (Froth) (v) <i>Enjal</i> (Deposits) (B) Neikuri:	Straw yellow Thin urine Normal Normal Normal Aazhi pol neendathu – pitham
7.	<i>Sparisam thervu</i> -	Chill
8.	<i>Naadi thervu</i> – examination of siddha pulse <i>Thanmai</i> (Character) <i>Naadi</i> (Pattern)	Normal Azhal piththam

MATERIAL AND METHOD

Table 2: Materials and method.

Centre of study	OPD of <i>Sirappu Maruthuvam</i> Department, National Institute of Siddha, Ayothidass pandithar Hospital, Tambaram Sanatorium, Chennai, Tamil Nadu, India.
Study Type:	Simple random single case study
Treatment protocol	1. Normalization of Altered <i>Uyirthathukal</i> 2. Internal Medicine 3. Exteranal Medicine

Table 3: Treatment summary.

S. No.	Name of Treatment	Name of the Medicine	Does and times of medicines	Anubanam (Adjuvant)
1	<i>Kazhichal Maruthuvam</i> (Purgation therapy)	<i>Meganatha kuligai</i>	2 tablets, od (early morning with empty stomach)	Hot water
2	Oil bath (Oleation therapy)	<i>Arakku thylam</i>	Q.S, (weekly two times and before sunrise)	Bath in lukewarm water
3	Internal Medicine	Tablet. <i>Elathy chooranam</i>	2 tablets, tds, after food	milk
4.	Internal Medicine	Tablet. <i>Muthuchippi</i>	2 tablets, tds after food	milk
5.	Internal Medicine	<i>Thetraankottai ilagam</i>	5 grams, bd after food	milk

All medicines are prescribed for 1 week. A patient asked to come for weekly once for follow-up. After the treatment of 6 months he got to relieve from symptoms.

COWS SCALE

The Clinical Opiate Withdrawal Scale is a numbered scale designed to help clinical tailor opioid withdrawal treatment to individual people. It is used in both inpatient and outpatient rehabilitation settings to determine the severity of opioid withdrawal and monitor how symptoms change over time during treatment. The scale uses 11 common symptoms of opioid withdrawal and measures their severity.

Table 4: COWS scale.

No	Score	Range
1.	5-12	Mild
2.	13-24	M0drate
3.	25-36	Moderately severe
4.	≥ 36	Severe withdrawal.

HAM-D SCALE

The Hamilton Rating scale has been considered the gold standard for assessing severity of depression and widely used in research.it is a multi-questionnaire used to provide an indication of depression and as a guide to evaluate recovery.

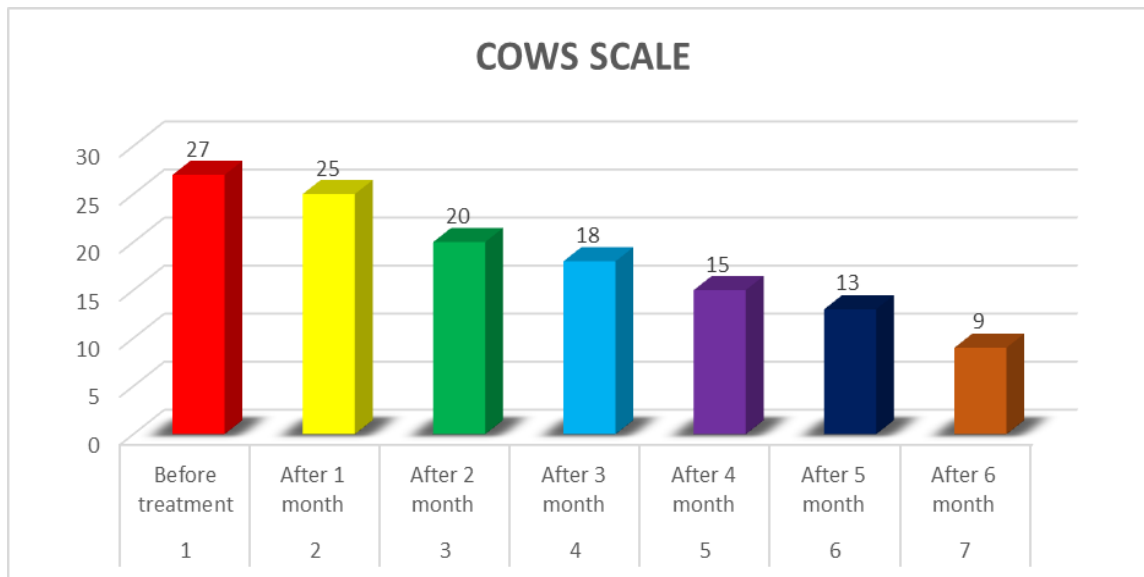
Table 5: HAM-D scale.

No	Score	Range
1.	0-7	Normal
2.	8-13	Mild depression
3.	14-18	Moderate depression
4.	19-22	Severe depression
5.	≥ 23	Very severe depression

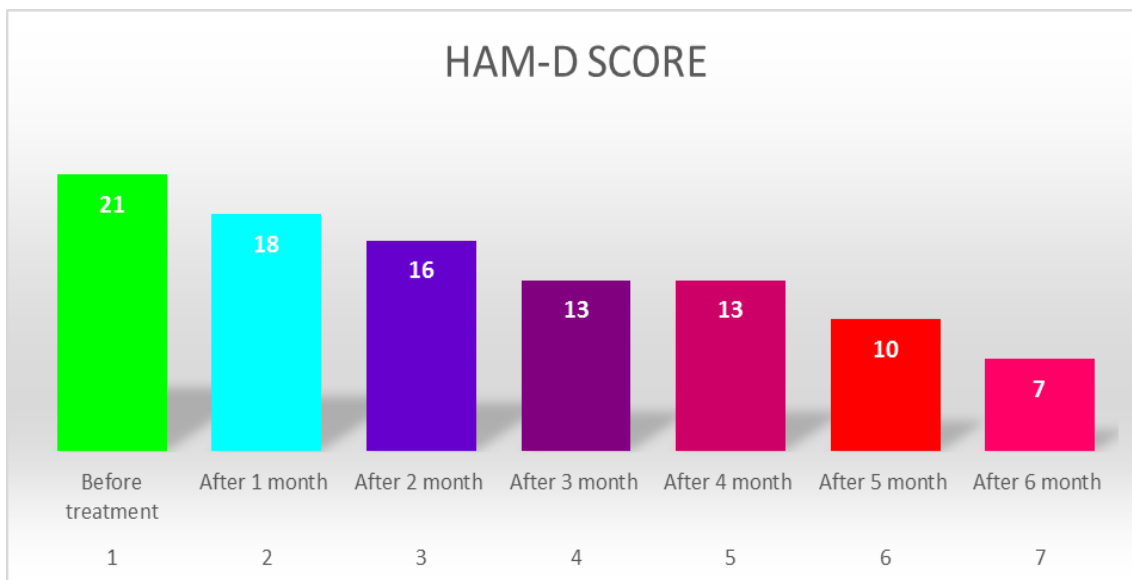
ASSESSMENT CRITERIA

The improvement of condition of the patient was assessed on the basis of COWS scale and HAM-D scale.

COWS SCALE improvement



HAM-D SCALE improvement



DISCUSSION

Siddha system is an ancient system of medicine which is admired all over the world for its application in overcoming the illness of human race. In Siddha system, Siddhars have listed the diseases of mankind as 4448. Among these diseases, *kirigai* which is a psychiatric disease

is classified into 18 varieties by *Siddhar Agathiyar*. The most of drug addiction and abuse symptoms are correlated with *madhathiyam*.

The codeine and chlorpheniramine are combination of an opiate agonist antitussive and a histamine-1(H1) receptor antagonist indicated for the relief of cough and symptoms associated with upper respiratory allergies or a common cold, it had a psychological and physical dependence. The abuse of cough syrups containing antihistamines and codeine is being increasingly noted.

In recent years, codeine -containing cough syrups (ccs) have been reported as substance of abuse, especially in adolescents. Chronic CCS (codeine contains cough syrup) abuse can induce physical and psychological dependence. However, the potential brain impairment caused by chronic CCS abuse has not reported previously. Nowadays many study reveals chronic ccs abuse may cause serious damage to the brain and the neuroimaging findings further illustrate the mechanism of ccs dependence.

The addiction is a chronic, relapsing brain disease defined by a physical and psychological dependence on drug, alcohol has formed, a person will pursue their toxic habits despite putting themselves or others in harm's way. While it can be tempting to try a drug or addictive activity for things to go south-especially in case of drug and alcohol abuse.

CONCLUSION

The antihistamines particularly chlorpheniramines and codeine are associated with the development of psychotic phenomenology, especially in predisposed individuals. Thus, it is important evaluate for psychosis in patients who have abused or have dependence on antihistamines.

From the above results, the Siddha line of treatment is responded well in physical, mental and social improvement in drug abuse or dependence symptoms. The single case study also strengthens the theory of drug abuse can be treated with siddha medicines with proper management.

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