

## **CASE REPORT**

# **Siddha Management of *Kamalai* – A Case Report**

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### **ABSTRACT**

*Kamalai* which is also called as *Manjal noi* in Siddha literature is a disease caused by increase of *Azhal kutram* in body. The case study deals with a pediatric patient presented with the symptoms of *Kamalai* and the *En vagai thervu* diagnosis of Siddha system of medicine also confirmed the diagnosis arrived by considering the clinical history of patient. Siddha drugs that are indicated for *Azhal kutra noigal* and specific medicine for *Kamalai* were prescribed to the patient. The patient got relieved from the symptoms of *Kamalai* on third day of treatment. The parameters of Liver Function Test also came to normal range on 14<sup>th</sup> day of treatment with drastic reduction in serum bilirubin level values on 3<sup>rd</sup> day of the treatment. As *Kamalai* is comparable with acute viral hepatitis, Siddha treatment for *Kamalai* may be followed for the treatment of acute viral hepatitis after evaluating the efficiency of treatment with large scale clinical studies.

### **KEY WORDS**

Acute viral hepatitis, *Kamalai*, Siddha medicine

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### **1.0 INTRODUCTION**

*Kamalai* is a disease mentioned in the Siddha literature characterized by pallor, yellowish discoloration of conjunctiva, tongue, lips, Yellow coloured urine and in later stages the colour of urine changes into red, Loss of weight, nausea, vomiting, indigestion, fatigue and motion sickness. *Kamalai* in Siddha can be compared with acute viral hepatitis.

Viral hepatitis is a great challenge to public health management in Indian scenario. Wide scale exposure to HAV in childhood leads to 90% to 100% seropositivity by adolescence.<sup>[1]</sup> Although the mortality associated with Hepatitis A virus is low, the treatment requires several days or weeks of hospitalization and cause absenteeism from school.<sup>[2]</sup> It needs 2 month duration for complete recovery from the symptoms of the disease.<sup>[3]</sup>

### **2.0 CASE REPORT**

An 11-year-old Female child from nearby slum area visited Siddha Clinical Research Unit (SCRU - CCRS) OPD, Bengaluru on 01/05/2018 with symptoms of fatigue, pain in abdomen, loss of appetite, nausea, yellowish discoloration of urine, constipation with clay coloured stools for four days. On examination, yellowish discoloration of sclera and nail beds, palpable liver with tenderness was observed. *Naadi* examination revealed *Azhal Aiya naadi*. Heart rate was 72 beats / minute, pulse rate – 72 beats/ minute.

The history of present illness first started with fever for 4 days since 24/04/2018, pain in abdomen, nausea, vomiting and undertook treatment with nearby general physician for fever, the patient's parents were unaware of the drug prescribed. The fever subsided on second day of the treatment but the patient

experienced nausea, vomiting, constipation, myalgia. As the parents noticed yellowish discoloration of sclera on 28/04/2018, they reported to the general physician. The physician prescribed blood investigation to rule out the cause of jaundice. The biochemical parameters and urine examination reports revealed hyperbilirubinemia, many fold elevation of transaminases, Albuminuria and hyperbilirubinuria. As the report suggested the probability of viral hepatitis, the physician referred the patient to Siddha Clinical Research Unit, Bengaluru.

On visit to SCRUI, Bengaluru, The patient was diagnosed as a case of *Kamalai* after the physical examination by *en vagai thervu* methods (diagnostic method followed in Siddha system of medicine) and after observing the clinical history, biochemical analysis and urine examination reports. The patient was advised to take HAV ELISA test, but the patient didn't follow that advice, as patient was very poor to bear the cost of blood test.

The following Siddha medicines were prescribed and the patient was advised to come for next review after 3 days, on 04/05/2018.

i. *Elathi choornam* -1 gram  
+ *Vedi annabedhi chendooram*-  
50 mg -2 times a  
+ *Kungiliya parpam*-50 mg day with  
+ *Silasithu parpam* – 50 mg butter milk.

ii. *Keezhanelli tablet* – 2 Tablets,  
3 times a day with butter milk

iii. *Santha chandrodayam mathirai* – At night after food with honey.

The patient was advised to take vegetarian diet and to avoid oil, milk and diet rich in fat content. As diet restriction for *Santha*

*chandrodayam mathirai*, the patient was advised to avoid bitter gourd and to restrict tamarind.

On 04/05/2018 when the patient came for review, physical examination revealed that there was no yellowish discoloration of sclera. On Palpation there was no tenderness over the liver region. The patient also felt relieved from the symptoms of myalgia, vomiting, nausea, constipation and pain in the abdomen. The patient observed mild laxative effect of medication with change in the colour of stools from the first day of treatment. Laboratory investigation also revealed three-fold decreases in Serum bilirubin level. Same medicines were repeated and the patient was advised to come for next review on 07/05/2018. The patient reported complete recovery from all the symptoms on her visit on 07/05/2018. *Santha chandrodayam mathirai* was removed from treatment regimen and all other medications were repeated. Diet restriction for *Santha chandrodayam mathirai* was also relaxed. On the next visit of patient on 14/05/2018, naadi was found to be *Vali azhal*, biochemical investigations were prescribed and it revealed the complete recovery of patient with all parameters of Liver Function Test within normal range. *Santha chandrodayam mathirai* was discontinued and the patient was advised to take the following medications for 1 month. Diet restrictions were completely relaxed.

i. *Elathi choornam* -1 gram  
+ *Vedi annabedhi chendooram*-  
50 mg -2 times a day  
+ *Kungiliya parpam*-50 mg with butter  
+ *Silasithu parpam* – 50 mg milk.

ii. *Keezhanelli tablet* – 2 Tablets,  
3 times a day with butter milk

**Table 1. Siddha drugs prescribed and its ingredients**

SN	Name of the drug	Ingredients
1.	Santha Chandrodayam	<i>Poritha Vengaram</i> (Dehydrated Borax), <i>Suthi seitha Pooram</i> (Purified Calomel), <i>Manjal podi</i> (Turmeric powder), <i>Elumicham pazha charu</i> (Lime Juice).
2.	Keezhanelli Tablet	<i>Keezhanelli</i> ( <i>Phyllanthus niruri</i> powder.)
3.	Vedi Annabedi Chendooram	<i>Suthi seitha Annabedhi</i> (Purified Green viterol), <i>Vediuppu</i> (Pottasium nitrate), <i>Elumicham pazha charu</i> (Lime juice).
4.	Elathi Chooram	<i>Lavangam</i> ( <i>Syzygium aromaticum</i> flower buds), <i>Milagu</i> ( <i>Piper nigrum</i> fruits), <i>Sirunagapoo</i> ( <i>Mesua ferrea</i> flower buds), <i>Thaleesam</i> ( <i>Taxus buccata</i> leaves), <i>Kookaineeru</i> (Arrow root starch), <i>Chukku</i> (Dried rhizome of <i>Zingiber officinalis</i> ), <i>Elam</i> ( <i>Eletteria cardomam</i> fruits), <i>Sarkarai</i> (Sugar).
5.	Kungiliya Parpam	<i>Vellai Kungiliyam</i> (Sal tree resin), <i>Ilaneer</i> (Tender coconut water).
6.	Silasithu Parpam	<i>Suthitha Karpoora silasithu</i> (Purified gypsum), <i>Siru seruppada charu</i> ( <i>Coldenia procumbens</i> L. leaf juice)

**Table 2. Prognosis observed in biochemical parameters and urine examination**

SN	Investigations	28/04/2018	04/05/2018	14/05/2018
1.	Serum Bilirubin (Total)	5.9 mg/dl	1.6 mg/ dl	1.2 mg/dl
2.	Serum Bilirubin (Direct)	3.0 mg/dl	0.5 mg/dl	0.4 mg/dl
3.	Serum Bilirubin (Indirect)	2.9 mg/dl	1.1 mg /dl	0.8 mg/dl
4.	AST	1504 U/L	-	32 U/L
5.	ALT	420 U/L	-	29 U/L
6.	Alkaline Phosphatase	1138 U/L	-	197 U/L
7.	GGT	112 IU/L	-	29 IU/L
8.	Total Protein	7.8 gm/ dl	-	8.5 gm/dl
9.	Serum Albumin	4.2 gm/dl	-	4.7 gm/dl
10.	Serum Globulin	3.6 gm/dl	-	3.8 gm/dl
11.	Albumin/ Globulin Ratio	1.1 :1	-	1.2:1
12.	Urine Examination	Colour- Dark yellow, Albumin- Present (+), Bile Salt (+), Bile pigments (+), Pus cells –6-8 cells/hpf, Epithelial cells – 5-5 cells/hpf, RBCs – Not seen	-	Colour – Light yellow, Albumin- Absent, Sugar – Absent, Bile salts- Nil, Bile pigment- Nil, Pus cells- 2-3 cells/hpf, Epithelial cells- 1-2 hpf, RBCs – Not seen

## 2.1 Time line

24/04/2018 – Patient complained of fever, pain in abdomen, nausea, vomiting.

Biomedical treatment was given by General Physician

26/04/2018- Fever subsided. Symptoms of nausea, vomiting and pain abdomen were persistent. Constipation and myalgia were present.

28/04/2018- Symptoms of Jaundice with yellowish discoloration of sclera, clay coloured stools, yellowish discoloration of urine were noticed.

29/04/2018- Biochemical investigation report and urine examination report suggested probability of acute viral hepatitis. The patient was referred to SCRU, Bengaluru.

01/05/2018 – The patient visited SCRU, Bengaluru. She was diagnosed as a case of *Kamalai* with *En vagai thervu* and *Naadi* examination. Siddha medicines were prescribed.

02/05/2018 – Patient observed change in colour of stools (Mild yellow coloured), Constipation relieved

04/05/2018 – Patient felt relieved from myalgia, vomiting, nausea. On examination, no yellowish discoloration of sclera observed. Three fold decreases in serum bilirubin level observed.

07/05/2018 – Patient completely recovered from all the symptoms.

14/05/2018 – Biochemical parameters including transaminases completely returned to normal range. *Naadi- Vali azhal*.

## 3.0 Discussion

*Kamalai* is the condition described in Siddha literature characterized by Icterus, Yellowish discoloration of urine, Myalgia, Nausea, vomiting and headache. *Kamalai* is caused by increase in *Azhal kutram* and diagnosed by *Azhal Aiyam* or *Azhal Vali naadi*. The first step in the line of treatment of *Kamalai* is to reduce the deranged *Azhal* to its normal level and prescribing medicines that act as

coolants to the body. *Santha chandrodayam* is the Siddha medicine indicated for *Azhal noi* in the Siddha literature, *Theraiyar vaithiyam 1001*.<sup>[4]</sup> *Santha chandrodayam* acts by expelling the *Pitha neer* in faeces. *Keezhanelli* (*Phyllanthus niruri*) and *Annabedi chendooram* are indicated for *Kamalai* in Siddha literature, *Agasthiyar gunavakadam* <sup>[5]</sup> and *Siddha vaidya thirattu* <sup>[6]</sup> respectively. *Elathi choornam* is indicated for all diseases that are caused by increase in *Azhal kutram*. *Kungiliya parpam* and *Silasithu parpam* reduces body heat. As the medicines prescribed reduce the *Azhal kutram* of the body, the symptoms of *Kamalai* were also relieved which was evident from the clinical history of the patient after medication.

There was drastic reduction in the parameters of Liver function test. Serum bilirubin level reduced nearer to normal range in just 3 days of treatment and the transaminases level decreased multifold to the normal range on the 14<sup>th</sup> day of treatment.

*Kamalai* is comparable with Acute Viral Hepatitis. Even the milder form of symptoms that appears in Jaundice associated with HAV infections, requires several days of hospitalization. As the infection occurs mostly in low income group because of low hygienic living condition, there is a need for treatment that promises faster recovery rate and is economic. The case study proves that prognosis of *Kamalai* is faster with Siddha line of treatment and the patient got relieved from the symptoms in three days. The biochemical parameters also returned to normal range within 2 weeks. Large scale clinical studies on *Kamalai* employing Siddha medicines may be conducted for further evaluation of outcome of this case report.

## Ethical approval

Consent was obtained from the patient for presenting the case study in journal. Ethical considerations were followed while giving

treatment to the patient. Care was taken to maintain the anonymity of patient.

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Nil

**Conflict of interest:**

There is no conflict of interest.

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