

STUDY OF *MARSILEA QUADRIFOLIA* (AARAI KEERAI) KASHAYA IN NEERILIVU NOI. (DIABETES MELLITUS)

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Introduction

The disease Neerilivu is called by different names; Mathumeham, Salarogam, Mihuneer, Vehumooththiram, Inippuneer, Mehaneer, Theanneer and diabetes. On the international basis this had affected many people. At the beginning only the rich became victims to this disease but now it affects both the rich and the poor.

According to the recent statistics by the year 2030, the number affected by this disease will rise up to 366 million. In the year 2009, 40.9 million were suffering from diabetes in India and in China 39.8 million as per statistics available. Diabetes comes fourth in rank among the diseases that causes more deaths in the world. In Asia 45 million people are affected by diabetes. In Sri Lanka we do not have any devices to assess the actual number affected as in other countries. How ever according to the statistics collected in 2005; 14.2 males and 13.5 females were affected by this disease. According to W.H.O assessment 2 million people are affected by diabetes in Sri Lanka.

In books; “ Siddha Maruthuvam (K.N.Kupusamy Muthaliyar – HPIM – 1987), Yuki vaidya Sinthamani (Yookimaamunivar – 1998), “Pararajasekaram” (I.Ponnaiahpillai – 2001) the following symptoms are cited for this disease, excessive excretion of urine, collection of ants and flies in places where a person passes urine, loss of physical strength exhaustion of body dry mouth etc. Further in the same books the following have been quoted as the causes of this disease.

1. Consumption of more and more sweet foods.
2. Lack of physical exercise
3. Increase in body weight
4. Heredity

The symptoms of the disease as quoted are:

1. Excessive hunger
2. Thirst

Though more food is taken to satisfy hunger, physical strength will not increase proportionately. Instead the body will grow weaker and weaker. The quantity of urine excreted will vary according to the water intake in addition there will be sleeplessness, mental disturbance, thick sweat, fatigue, sighs, unconsciousness, With these signs the disease will worsen. As this urine has the colour density and smell of honey it is called as “Theaneer”

As a result of the above causes, “Samanavayu”, “Ushanavayu”, “Abanavayu” which created will induce burns and cause this disease as said in Siddha Vaidyam and Yuki Sinthamany.

In Gunapadam Part I, Page 78, *Marsilea quadrifolia* kashaya is recommended as a medicine for it. The other names mentioned for it are “Sathuppani” “Neeravarai” Its botanical name is mentioned as *Marsilea quadrifolia*

About *Marsilea quadrifolia* Theran's verse is quoted below.

“தின்றா லுரிசைதருந் தீராப் பயித்தியத்தைப்
பொன்றாத நீரிழிவைப் புண்ணீரை-யென்றுமிந்த
வூராரைச் சாரம லோட்டிவிடு நாலிதழா
நீராரைக் கீரையது நீ”

குணபாடம் பகுதி ஐஇ பக்கம் -78

Methodology

The methodology adopted was by researcher which typified supervision of patients under clinical study. The studies were undertaken in free medical clinics functioning under Vadamardchi South, West Pradesha sabas. It was done between 2011 February - 2012 February. A population of 90 patients male and female between the age of 40 – 70 were selected for study.

Clear inclusion criteria adopted for selection of patients. Among the said selected patients, 90 were selected whose blood had a glucose level of 120 – 200 mg/dl. A FBS Test was also made. In the same way a distinct exclusion criteria was also adopted for the research, The patients who had (FBS Test) more than 200 mg/dl glucose those who were in fainted state, those who had more suffering, those who took Alopahy drugs and those include other diseases were excluded.

Special Instruments were used for the tests. For Urine – Benedicts test and the instruments used was a Pipette, 5 ml Benedict solution, 8 drops of Urine and boiled for few minutes and allowed to cool down for few minutes and colour of the solution was observed. For blood test a Glucometer was used. The method of measuring blood glucose level using the Glucometer also includes other than Glucometer, Test strips in vial, adjustable automatic lancing device, sterile lancet and check strip. For fasting blood sugar test a minimum of 6 hrs. fasting period (without food or water or any drink) is required.

The drug for the research includes *Marsilea quadrifolia* kashaya (Inner drug) and Ingredient Leaves of *Marsilea quadrifolia* and the Method of preparation is as follows:

Marsilea quadrifolia leaves were washed and dried in shad. 50g of dry leaves were put in vessels and then 8 times of water added and dried to 1/8, filtered kashaya to be given in the morning and evening for 49 days.

The study procedure followed is as follows - 90 patients were selected from among those who came for treatment. They were briefed about the research and their consent recorded. The medical history of the patient, raise of blood sugar, Urine test for sugar – these details are recorded in the special case record prepared by the researcher. The 90 patients were divided into three groups and treated.

Group I : *Marsilea quadrifolia* kashaya 60ml was given both morning and evening. Diet restrictions observed.

Group II : Same treatment repeated but diet restrictions not observed.

Group III : Only diet restrictions observed without drug treatment.

Continuous observation: The patient is asked to report once in 10 days for 05 times and progress of signs and symptoms recorded. Blood is also tested and recorded in the schedule below:

Symptoms	10 th day	20 th day	30 th day	40 th day	50 th day
Thirst Hungry Number of times urine excreted per day & night					
Blood	Blood sugar FBS				
Urine	Test colour				

Discussion and Conclusion

The collected data were statistically recorded and analysis made according to the analysis Blood sugar was seen reduced to 50 – 60 mg/100dl to 80 % of those who took the drug and also observed diet restrictions. It was seen reduced to 30 – 40 mg/100dl to 60 % of those took the drug but ignored the diet restrictions. It was seen reduced to 20 – 30 mg/100 dl to 50 % who observed diet restrictions only. This proves that *Marsilea quadrifolia* kashaya is the best medicine for those affect by Neerilivu Noi.

Signs and symptoms of Neerilivu Noi are almost similar to Diabetes Mellitus. Hence we can use this medicine in Diabetes mellitus without any adverse effect. This medicine is the best medicine for Neerilivu Noi because ingredient of this medicine is easily available, not expensive and non toxic.

References

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