



PREPARATION OF GUDUCHI KWATH AND PROCEDURE OF ITS APPLICATION ON DENGUE FEVER

Ayurveda

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ABSTRACT

The aim of this "Preparation of guduchi kwath and procedure of its application on dengue fever" thus guduchi kwath was prepared as per the Sharangdhara Samhita. Charakacharya has quoted that for Doshapachan and Shaman, decoctions made from Tikta Rasa are advisable. As Tikta Rasa is having prominently Vayu and Akash Mahabhuta, the Dravyas having Tikta Rasa are Laghu, cleans the Strotas, have Sheeta Veerya and does the Pachan. By Agnivardhan property, these Dravyas act on Agnimandhya, Aam and Pittanubandh, thus helps in the pathogenesis (Samnya Sampraptibhanga) of Jwar (fever). It is seen that fresh Guduchi Kwath in the dose of 40 ml morning-evening in the dengue haemorrhagic fever showed improvement in the platelet count. This can be used as a single drug in uncomplicated cases. Helps in lowering the temperature. Helps in relieving the maculopapular rash. Works as an antiallergic and antihistaminic. No any kind of side effect of the Guduchi Kwath seen.

KEYWORDS

Dengue fever, Guduchi kwath.

Introduction :-

India is leading towards new developments and advancements. A person in this busy schedule today hardly gets time to look after his individual health. Lifestyle has been so much altered in modern era that there is hardly any resemblance with the Daily regime /seasonal regime as well as diet and life style as demonstrated in Ayurved. Food habits have changed immensely consumption of fast food, tin food; beverages, preservative added food is a regular part of life now days.

Next comes the issue of hygiene. In altered life style personnel social and environmental hygiene is also important. Environmental sanitation is a major public health issue in India. **Swachh Bharat Abhiyan** in India has highlighted the importance of prioritizing control strategies. The rapid growths of crowded cities increase in urban slums poor sanitation and water problems have helped spread and increase the transmission of dengue and other vector borne diseases. As early the 1980s, dengue fever had reached epidemic proportions in some countries in Asia long before climate change became an issue. Rapid urbanization, increase in air travel and lack of mosquito control are the main drivers of the disease."

Ayurveda is a scientific knowledge of life which has the priority of to the protection of health and prevention of diseases.

Need of Research

Due to altered life style and urbanization which lacks sanitation, now a day's Dengue fever has become very common. During the seasonal transformation particularly rainy and summer, its picture in common medical practice represents as an epidemic. Though the mortality rate has come down compared to earlier times due to low virulence of the dengue virus, still it is major risk which may lead to mortality. Mortality is generally present due in patients of high risk groups like immune compromised patients old persons, known uncontrolled diabetic patients etc. Apart from mortality the patients who get recovered from dengue fever also suffer from post recovery symptoms like Joint pains myalgia which last for a long duration.

As there are many misconceptions regarding Dengue fever and people opt to various medicinal and a food material particularly when patient is crippled with the disease.

Guduchi which is also known as Amruta is having Anti-inflammatory, antibacterial, antimicrobial, antipyretic, anti-arthritis, anti-allergic, hepato-protective, analgesic, immuno-modulator, antioxidant pharmacological activities.

Aim & Objectives

Aim: To Prepare guduchi kwath and explain the procedure of its application on dengue fever.

Objectives:

1. To explain the standard method of preparation of guduchi kwath

as per sharngdhara samhita.

2. To explain the ideal procedure of its taken in dengue fever.
3. If any, Side effects of Guduchi kwath will be observed.

MATERIALS AND METHODS:

Material: Guduchi (Tinospora Cordifolia)¹

गुडुचि कटुका तिक्ता स्वादु पाका रसायनी।

संग्राहिणी कषायोष्णा लघ्वी बल्यपिनि दीपनी।

दोषत्रयामृतृदाहमेहकासांश्च पाण्डुताम्॥

कामला कुष्ठवातास्त्रज्वरकृमीवमीन हरेत्।

प्रमेहश्वासकासांश्चः कृच्छ्रहृद्रोगवातनुत्॥ भावप्रकाश निघण्टू ६-९

Properties

Rasa	- Titka, Kashay
Virya	- Ushna
Vipak	- Madhur
Guna	- Guru, Snigdha
Prabhav	- Vishaghna

Karma

Doshakarma - Tridoshashamak, Pittasarak

Other Karma - Kushthaghna, vedanasthapan, trushnanigrahan, dipan, pachan, anuloman, krimighna, hridya, rasayan, balya, vishaghna, vrushya, pramehaghna, mutrajanan, jwarahar, sangrahi

Chemical Composition – Tinosporine, tinosporon, tinosporic acid, tinosporol, tinosporide, tinosporidine, columbin, chasmanthin, palmarin, berberine, geloin, giloisinis, 1,2-substituted pyrrolidine, etc.

Pharmacological Actions

Hypoglycemic, anti-inflammatory, antibacterial, antimicrobial, antipyretic, antiarthritic, antiallergic, hepatoprotective, analgesic, immunostimulant, antioxidant, hypotensive, adaptogenic, antitumor, antidiabetic, etc.

Use In Various Diseases

Gout, skin conditions, haemorrhoids, diabetes, fevers, rheumatoid arthritis, eye diseases, general debility, asthma, vomiting, flatulence, acid gastritis, fractures

Useful Parts – Stem, Leaves, Sattva, Root

Pharmacognosy

Stem – terete, sparsely lenticellate. Young stem green with smooth surfaces and swelling at nodes, older ones show a light brown surface marked with protuberances due to circular lenticels.

Dose - Stem powder – 3-6 gm, Stem decoction – 50-100 ml, Sattva – 1-2 gm

Preparation of Kwath for one time:

पानीयं षोडशगुणं क्षुण्णे द्रव्यपले क्षिपेत् ॥ ४३ ॥

मृत्पात्रे क्वाथयेत् ग्राह्यमष्टमांशावशेषितम् ॥

तज्जलं पाययेद्धीमान् कोष्णं मृद्वग्निसाधितम् ॥ ४४ ॥

शृतःक्वाथः कषायश्च निर्यूह स निगद्यते ... शा.सं. मध्यमखंड (२/१,२)

1/2 Pal (20 gm) Guduchi Kand (stem) bharad taken and added with 16 times of water (320 ml) ,boiled on Mandagni upto 40 ml (1/8th part) remains. Then filtered it and given after both meals.²

Guduchi and Tikta Rasa

Charakacharya has quoted that for Doshapachan and Shaman, decoctions made from Tikta Rasa are advisable. As Tikta Rasa is having prominently Vayu and Akash Mahabhuta ,the Dravyas having Tikta Rasa are Laghu,cleans the Strotas,have Sheetaveerya and does the Pachan.By Agnivardhan property,these Dravyas act on Agnimandhya,Aam and Pittanubandh,thus helps in the pathogenesis (Samnya Sampraptibhanga) of Jwar (fever). Thus Guduchi having Tikta and Katu Rasa does Agnideepan, Aampachan

Guduchi is antibacterial,anti-pyretic, immunomodulator, analgesic, having no any kind of toxicity, hepatoprotective, anti-inflammatory, antimicrobacterial, Smooth muscle relaxant, antioxidant, cardioiprotective hopoglycemic activity and thus helps in dengue haemmoraghic fever.

- Guduchi bharad purchased from local Ayurved medical stores.
- The standardization of drug was done in BVDU-COA, Rasashastra Department.
- The authentication of drug was done from recognized institute.

METHODS:

Type of study: Randomized controlled clinical trial

Place of study: Bharati Vidyapeeth Deemed University,College of Ayurved, and hospital , Pune- 411043.

Selection criteria**Inclusion criteria:**

- IPD Patients.
- Patients of either gender having age above 18 years up to 60 years.
- Having viral fever with thrombocytopenia and diagnosed on the basis of lab. Investigations - Dengue IgG, IgM, NS1Ag either test positive or two tests positive or all tests positive.
- Platelet count $\geq 30000/\text{cumm}$.

Exclusion criteria:

- Patients having age 18 years & below 18 years and above 60 years.
- Platelet $< 30000/\text{cumm}$
- Patients having active bleeding- gum bleeding, hematuria, PR bleeding and any kind of bleeding
- syndromes/ disorders.
- Malarial fever, Typhoid fever, UTI, Rickettsial fever, URTI, LRTI
- Any other major illness like Diabetes, Hypertension, IHD, MI, Renal diseases, meningitis.
- Pregnancy, lactating mother, PV bleeding, DUB.
- Chronic alcoholic, liver cirrhosis.
- Dengue shock syndrome
- H/o. upper GI bleed, small intestine bleeding, lower GI bleeding
- Patient known history of idiopathic thrombocytopenia.

ASSESSMENT CRITERIA:-**Objective Criteria**

- Platelet count
- Axillary body temperature by using thermometer every 6 hourly.

Subjective criteria-

- Headache
- Backache, Joint and muscle pain/ache in the extremities with break bone
- Skin Rash
- Petechial hemorrhages, on the extensor surface of the limbs and over chest
- Itching

Laboratory investigations -

- Haemogram
- Platelet count daily –quantitative study

- LFT, PT
- Dengue- , NS1Ag, IgG, IgM.

PRIMARY END POINTS

Improvement in the platelet count.

SECONDARY END POINTS

1. Reduction in symptoms of dengue fever.
2. Normalization of body temperature

Criteria	Screening and Treatment start	V1	V2	V3	V4	V5	V6	V7
Visits	visit 0							
Clinical examination	✓	✓	✓	✓	✓	✓	✓	Assessment
Daily platelet count	✓	✗	✗	✗	✗	✗	✗	Assessment
laboratory & other Investigation	✓	✗	✗	✗	✗	✗	✗	Assessment
Treatment	✓	✓	✓	✓	✓	✓	✓	Assessment

OBSERVATION**Probable mode of action Guduchi :-**

Charakacharya has quoted that for Doshapachan and Shaman, decoctions made from Tikta Rasa are advisable. As Tikta Rasa is having prominently Vayu and Akash Mahabhuta ,the Dravyas having Tikta Rasa are Laghu,cleans the Strotas,have Sheetaveerya and does the Pachan.By Agnivardhan property,these Dravyas act on Agnimandhya,Aam and Pittanubandh,thus helps in the pathogenesis (Samnya Sampraptibhanga) of Jwar (fever). Thus Guduchi having Tikta and Katu Rasa does Agnideepan, Aampachan

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Conclusion

- 1) fresh Guduchi Kwath in the dose of 40 ml mor-evening in the dengue haemorrhagic fever showed improvement in the platelet count
- 2) This can be used as a single drug in uncomplicated cases.
- 3) Helps in lowering the temperature.
- 4) Helps in relieving the maculopapular rash .
- 5) Works as an antiallergic and antihistaminic
- 6) No any kind of side effect of the Guduchi Kwath seen
- 9) More blind studies are needed.

REFERENCES:

- 1) Bhavprakash Nighantu 6-9
- 2) Sharangdhar samhita madhyam khand 2/12