A single case study: Guduchi Kwath (Tinospora Cordifolia) in dengue fever

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Abstract

25 years female patient presented with complaints of high grade fever (103° F) with chills, cold, headache, backache, hyperacidity and ache in the extremities with break bone accompanied by pharyngitis, conjunctival suffusion and generalized weakness since 3-4 days admitted for 11days. On Examination–P-110/m, Tachycardia, BP- 98/68 mm of Hg, RS-bilateral basal crept smild, CVS-NAD, CNS – Conscious, oriented, restless and anxious. Toxic look due to fever. P/A- mild tenderness in right and left hypochondriac and epigastric region, shifting dullness and horse shoe shaped dullness on percussion over abdomen.

Keywords: Dengue fever, Vishamjwar, Platelet count, Petechiae, Thrombocytopenia, Guduchi Kwath

Introduction

Dengue fever is an acute infectious disease caused by an arbo virus in the Flavivirus genus & is transmitted mainly by bites of the Aedes aegypti and Aedes albopictus mosquito species. There are four serotypes (DEN-1, DEN-2, DEN-3 & DEN-4). The disease manifestations ranges from a flu like illness known as dengue fever to a severe fatality known as dengue haemorrhagic fever and dengue shock syndrome. This disease can be correlated with Vishamjwar in Ayurved.

Charakacharya has explained jwara in 8 types (as per Doshapradhanya); viz. Vataj, Pittaj, Kaphaj, Sannipataj, Vatapittaj, Vatakaphaj, Pittakaphaj and Agantuj. Also Charakacharya has described Vishamjwarseparately which is based upon the pattern of Jwaravega due to Dosh gati. It is of five types; viz. Santata, Satata, Anyedyushka, Tritiyaka and Chaturthaka.

a) Santata Jwar-It is Rasa Dhatwashrit. According to Doshapradhanya the Jwarvega remains for 7, 10, 12 in Vataj, Pittaj, Kaphaja Respectively. Nature of fever is continuous or remittent.

b) Satata Jwar-It is Rakta Dhatwashrit. Jwaravega occurs twice in one Ahoratra i.e. 24 hours. Nature of fever is double quotidain two peaks per 24 hours.

c) Anyedyushka Jwar-It is Mamsa Dhatwashrit. Jwaravega occurs once in one Ahoratra i.e. 24 hours. Nature of fever is Quotidian one peak per 24 hours.

d) Tritiyaka Jwar-It is Meda Dhatwashrit. Jwaravega occurs on every third day. Nature of fever is Tertian fever every third day.

e) Chaturthaka Jwar-It is Asthi-Majja Dhatwashrit. Jwaravega occurs on every fourth day. Nature of fever is Quartan fever every fourth day.

Bhavprakash has explained Dandakjwara and Asthibhanjanjwara in Jwarchikitsa Adhyay. Dandakjwara is also called as Dandapatanakjwara which is explained in sannipataawastha. Dengue fever is also called as Break Bone Fever, which can be correlated with Asthibhanjanjwara.

Upadrava

Raktashthivi Sannipata. Charakacharya has explained Raktashthivi Sannipata as an Upadrava of Dengue fever i.e. Vishamjwar. Due to Tridosh Prakop (Sannipata), Haemoptasis occurs (Raktashthivan). In advanced stage of Dengue Haemorrhagic Fever, this stage may occur.

Case Study

25 years female patient presented with complaints of high grade fever (103° F) with chills, cold, headache, backache, hyperacidity and ache in the extremities with break bone accompanied by pharyngitis, conjunctival suffusion and generalized weakness since 3-4 days admitted for 11days.Patient had earlier fever for 2 days, relieved and again there was relapse of the fever. Patient diagnosed as having Vishamjwar as having Teevra Vegi Jwar, Angamarda and pattern of fever. Patient had conjunctival suffusion along with maculopapular rash and petechiae (Petechial haemmoraghes), on the extensor surface of the limbs and over chest and abdomen.
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Also complained of mild itching on the day of admission. Patient also complained mild dyspnée on exertion with abdominal discomfort due to mild ascitis. Patient had no history of any kind of major illness in the past.

On Examination
P-110/m, Tachycardia, BP- 98/68 mm of Hg, RS- bilateral basal crepts mild, CVS- NAD, CNS – Conscious, oriented, restless and anxious. Toxic look due to fever. P/A-mild tenderness in right and left hypochondriac and epigastric region. Shifting dullness and horse shaped dullness on percussion over abdomen.

On Investigation
On admission 24.11.15 HB- 13.2 gm%, TLC- 4200/cmm. Platelet Count-111,000/cmm, E.S.R.-16 mm/hr S. Urea- 32mg/dl, S. Creatinin 1.1 mg/dl, LFT- normal; S. Electrolytes-S. Sodium 133.6 mEq/L, S.Potassium- 2.9 mEq/L,S.Chloride-100 mEq/L Urine Examination – Proteins- +, Pus cells- 3-4/hpf, Epithelial cells- 5-6/hpf, No RBC’s Dengue IgG: Negative, IgM: Negative, Dengue for NS1Ag: Positive

X-ray Chest- Bilateral lung congestion- mild pleural effusion; RMT – Negative

USG – Abd –Pelvis- mild ascitis, Edematous gall bladder wall
25.11.15 Platelet Count- 78000/cumm
26.11.15 morning Platelet Count- 18000/cumm.S. Electrolytes-S.Sodium-140.3 mEq/L, S. Potassium- 4.0 mEq/L, S. Chloride-108.3 mEq/L
27.11.15 Morning Platelet Count- 13000/cumm Evening-19,000/cumm
28.11.15 Platelet Count- 22000/cumm
29.11.15 Platelet Count- 25000/cumm
30.11.15 Platelet Count- 26000/cumm
1.12.15 Platelet Count- 21000/cumm
2.12.15 Platelet Count- 46000/cumm
3.12.15 Platelet Count- 55000/cumm
4.12.15 Platelet Count- 1.03 lakh/cumm
On Discharge 5.12.15 Platelet Count- 145000/cmm
X-ray Chest-NAD,
USG – Abd-Pelvis -NAD

On Treatment
- Guduchi Kwath 40 ml mor-eve form admission till discharge from the hospital.
- Propped Up Position, Isolation and bed with mosquito net
- Tepid sponging Sos
- Inj. Febrinil 2 cc iv in high grade fever wherever necessary in the beginning
- Volume support- RL and IV fluids over first 3 days and encouraged for oral intake specifically liquids and later soft diet.
- Blood product (RDP 4 points) given on 26.11.15 in the evening when platelets dropped to 12000/cumm and patient complained of hematuria. Relatives were in hurry regarding the recovery of the patient and patient herself was excited and anxious.
- No antibiotics, corticosteroids given.

Preparation of Guduchi Kwath
1 Pal (40 gm) of raw of Guduchi Kand (stem) taken and added with 16 times of water (640 ml), boiled (Mandagni) and reduced to 80 ml (1/8th part), filtered and administered in the morning and evening.

Guna (Properties of Guduchi)
Rasa-Titka, Katu, Kashay Veerya-Ushna,
Vipak Madhur (swadu),
Karma-Rasayan, Tridoshashamak, Pittasarak Karma Prabhav-Vishaghna

Tikta Rasa
Charakacharya has quoted that for Doshapachan and Shaman, decoctions made from Tikta Rasa are advisable. AsTikta Rasa is having prominently Vayu and Akash Mahabhuta, the Dravyas having Tikta Rasa are Laghu, cleans the Strotas, have Ushnaveerya and does the Pachan. By Agnivardhanproperty, these Dravyas act on Agnimirandhya, Aam and Pittanubandh, thus helps in the pathogenesis (Samanya Sampraptibhangha) of Jwar (fever). Guduchi by its Titka, Kashay Rasa, Ushna Virya, Madhur Vipak, Tridoshashamak, Pittasarak Karma and Vishaghna Prabhavhelped in the dengue patient.

Sampraptibhangha
Tikta Rasatmak Kwath (Guduchi) ↓
Doshapachan and Pittasaran ↓
Ushnaveerya of Guduchi ↓
Pachan and Agnivardhan ↓
Amapachan ↓
Samanya Sampraptibhangha of Jwara ↓
Jwaravega Mukti

Pathya- Manda, Peya, Vilepi, Siddha Dudgha, Phalarasa, Shadangodak, Siddha Jala

Vihar- Strict bed rest, No any kind of exertion or overexertion, toilets should be near to the bed or bed-pans advisable. Attendant is necessary.

Apathya (Contraindication) – During active and remission phase of fever till patient regains exercise, exertion, overeating, bath and unnecessary exertion should be avoided.

Result
1) Guduchi Kwath in the dose of 40 ml mor-evening in the denguehaemorragic fever showed improvement in the platelet count.
2) Helps in lowering the temperature and relieving the maculopapular rash.
3) Helpful in hepatitis and hepatomegaly, works as an antiallergic and antihistaminic, it’s a good appetizer. Shows overall improvement.
4) No any kind of side effect of the Guduchi Kwath found
5) This can be used as a single drug in uncomplicated cases.

Conclusion
Dengue fever is becoming common now a days. Treatment with Ayurvedic medicines is simple in uncomplicated cases. Very complicated cases may require aggressive icu management. Guduchi Kwath in the dose of 40 ml mor-evening for 15 days in the dengue hemorrhagic fever showed improvement in the platelet count and overall improvement.

References