



# Hand, foot and mouth disease management according to Ayurveda -A case study

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**ABSTRACT** – Hand, foot, and mouth disease (HFMD) is a clinical syndrome characterized by an oral enanthem and a macular, maculopapular, or vesicular rash of the hands and feet caused by enteroviruses of Picornaviridae family. Most commonly caused by Coxsackievirus A16 and Enterovirus 71 Herpangina is a benign clinical syndrome characterized by fever and a painful papulovesiculo-ulcerative oral enanthem<sup>(1)</sup> It is usually found in infant, toddler pre school going child but can also occur in school going age. The clinical symptoms are low-grade fever, cough, malaise, and typical maculopapular or Vesicular eruptions on the hands, feet, and oral cavity, and sometimes the buttocks and legs. Lesions heal spontaneously in 5-7 days. According to Ayurveda Vata pitta doshas lead to rasa rakta Mansa dushti. So in this case Pittashamak and Raktashodhak Chikitsa should be beneficial

**KEYWORDS** – HFMD, ayurveda, Pittashamak, Raktashodhak, Coxsackievirus

**INTRODUCTION** – HFMD was first reported by Robinsons and Rhodes in 1958 from Toronto, Canada. It is caused by Enterovirus belonging to family picornaviridae. It is commonly associated with the infections due to Coxsackie A16 or enterovirus 71<sup>(2)</sup> The disease peculiarly affects children less than 10 years of age. It rarely affects in adult. It typically occurs in small epidemics summer and autumn months. Feco-oral route is common mode of transmission than droplet infection. Vertical transmission from mother to fetes may possible. The disease is highly contagious to other family members and children in schools. Incubation period is from 5 to 7 days.<sup>(3)</sup> According to Ayurveda we can explain it as vitiation of Rasa and Rakta dhatus with Vata and Pitta dominance. The Srotas affected are Rasa and Raktavaha. Eruption of skin and mucus membrane is due to involvement of Rasa and Rakta dhatus and excessive pain in eruption is due to Vata and redness/erythema with fever is due to Pitta<sup>(4)</sup> Kandu present in this condition is mainly due to Kapha. We can say this viral disease is mainly due to Vata and Pitta dosha and slightly due to the kapha involvement. Hence we can say that disease is Tridoshatmaka.

n modern medicine very limited options are available like analgesics, antipyretics and in severe illness antiviral drugs which has various side effects. According to Ayurveda, no disease can cross the presence of Tridosha. Any disease or dysfunction in the body itself is an indicator of these factors. So we can treat any disease after the evaluation of these factors with Ayurvedic fundamentals<sup>(5)(6)</sup>

### Case report

A 3-year-old male child was brought by mother in OPD for fever and maculopapular rash for a period of 4 days. On general examination there were eruptions over the hand, feet, knee, elbow and buttocks. Child was irritable. Skin eruptions were around 1 mm in diameter and redness over it. Based on the clinical features a provisional diagnosis of HFMD was made. patient was given internally Paripathadi kadha 3.5ml BD for 7 days, yastimadhu grut for local application were applied externally on lesions alternately 5 times a day for seven days. Patient was reviewed after 4 days, general condition of a child was improved, irritability was decreased and

### Treatment:-

Paripathadi kadha 3.5ml BD for 7 days,

yastimadhu grut 5 time for 7 days

Assesment criteria 1. Kandu (Itching) 2. Raktavarna(Erythema) 3. Shool (Pain) 4. Pidika Unnati (Papule/vesicle elevations)

Grading	0	1	2	3
Kandu (Itching)	No itching	Mild itching (only aware of itching when relaxing)	Moderate (Sometimes disturbs the sleep and day time activity)	Severe (Constant itching, frequent sleep disturbance)
Raktavarna (Erythema)	No erythema	Light red	Moderate red	Bright red
Pain	No Pain	Mild pain of easily bearable nature	Moderate pain but no difficulty	Appears frequently and requires some measures for relief
Pidika Unnati (Papule/ves)	No Pitika unnati	Elevations can not be palpable	Apparently palpable	Apparently palpable (Approx.

icle elevations)				about 1mm No Pain)
mukha daha	No mukha daha	Mild pain	Pain after drinking and eating	Unable to eat and drink

### Obesrvation

Sr. no	Symptoms	Day 3 <sup>rd</sup>	Day 5 <sup>th</sup>	day7 <sup>th</sup>
1.	Kandu (Itching)	Moderate disturbs the sleep and day time	Mild itching	No itching
2.	Raktavarna(Erythema)	Light red	No erythema	No erythema
3.	Pain	Mild pain of easily bearable nature	No Pain	No Pain
4.	Pidika Unnati (Papule/vesicle elevations)	Apparently palpable (Approx. about 1mm No Pain)	Elevations can not be palpable	Black macule form
5.mu kha daha	Pain after drinking and eating	Mild pain	No mukha daha	No mukha daha

### DISCUSSION

In ayurvedic view the main Ritus in which the disease manifest are summer and autumn which is pitta prakop kal In HFMD .The disease manifestation is fever with eruption of skin on hand and feet and mucus membrane inside oral cavity which can be correlated with Vata, Pitta and Rakta involvement and can be treated accordingly. According to Ayurveda we can explain it as vitiation of rasa and Rakta dhatus with Vata and Pitta dominance.

The Rasa and Raktavaha strotas were involved. Eruption of skin and mucus membrane is due to involvement of Rasa and Rakta dhatus and pain is due to Vata and redness with fever is due to Pitta<sup>(9)</sup>

The mukha. Due to pak there are symptoms like mukh dah(burning sensation ), vedana(pain) at the site, and mukhpak (mouth ulcers). Due to pitta prakopak aahar like spicy,oily,junk food, fast food, and pitta prakopak vihar i.e. late night sleeping, irregular timings of meals pitta prakop occurs & this prakupit pitta is the main pathological factor for causing the mukhpak. Due to Guna of Yashtimadhu ghruta i.e. tridoshghna, shothhar, shoohar and most importantly vranropa

Pripatahadi kadha is an ayurvedic propiety medicine which contains Paripatha , Gulabkali , Raktachandan , Yashtimadhu , Guduchi , Draksha , Haridra , Sonamukhi , Dhanyak , Jiraka , Vasa ,patola,Dhamasa,Khairsal, Musta , Ushira,Kirattikta, Katuki, Neem, Pittapapada, Dhataki etc. Most of the ingredients of Pripatahadi kadha are tikta rasa pradhan and sheet viryatmak having properties of Raktapittahara, Dahahara . So it helps in reducing the vitiated pitta and rakta, also acts as a daha prashmana<sup>(10)</sup>

### CONCLUSION:-

This study suggests that, the local application of yastimadhu grut showed significant result in treatment of Hand, Foot and Mouth Disease (HFMD). In this case study patient completed the full course of treatment without any adverse reaction to local therapy. The lesions were progressively cured during the treatment period and gradually the skin became almost normal

It is viral disease characterised by a brief febrile illness and typical vesicular rash. Modern medicines has only symptomatic treatment. Many ayurvedic formulations works better in this type of viral diseases. In this type of viral disease always a need of some ayurvedic treatment wich can be normalize the vitiated doshas. There are various effective kalpas described in our classics for skin eruption and these should be practiced. In prolong cases of hand foot mouth disease, medicines like Paripathadi kadha , yastimadhu ghrut etc. should be used in large number of cases.

The study concluded that the given treatment is effective in the case of HFMD and this is one of the safest drugs used in pediatric practices.

### REFERENCE

1. Dinulos J. Habib's Clinical Dermatology: A Color Guide to Diagnosis and Therapy, 7th edition. Amsterdam, Netherlands: Elsevier; 2019. pp 529-30
2. Inamadar Arun, Textbook of paeditric dermatology 2nd ed Jaypee publications,New Delhi , page 207-208
3. Dr.Gopakumar, Sparsam, published byTime offset printing press, 2015; 1: 32-33.
4. Charak Samhita with vidyotinihindi commentary of Pt. Kashinath shastri, part-1, chukhambha Sanskrit sansthan, Varanasi, Sutra Sthana, 1997; 5: 19-5.
5. Sushruta Samhita, edited with ayurvedatattvasandipika- hindi commentary, chukhambha Sanskrit sansthan, Varanasi, 2001; 14: 24-19.

6. Dr. Jyotirmitra Acharya Sanskrita Commentry. Acharya Vruddha Vagbhata, Astanga Samgraha. Chikitsa Sthana. Chaukhambha Krishnadas Acadamy, Varansi, 2012.
7. Journal of Network Medicine and Targeted Therapies, A Case Study: Vipadikahara Grita Taila as a Remedy for Vipadika Skin Disease published on, 2018; 107: 1-2577.
8. Developing Guidelines for Clinical Research Methodology in Ayurveda by Prof. M.S Baghel, p. no 59
9. . Ranjeet Balasaheb Rupnar, Deepak S. Khawale, and Shraddha Dilip Hankare. Role of Durvadi Lepa in HAND, FOOT, AND MOUTH DISEASE – A CASE STUDY V 19 Issue 6, 2020.
10. Kranti Metkar ,A Clinical Evaluation of Paripathadi Kadha On Rajika (Prickly Heat) ,Ayurlog National Journal of Research in Ayurved Science-2017; 5(4): 81-87 , vol 5 issue 4-July-sept-2017

