Hand, foot and mouth disease –management through
Ayurveda -a short case report

Vinayak Galatage*1, Swapnil V2 Rashmi Moogi 3

1. Associate professor, (PhD), Department of Kaumarbhriya, Krushna Ayurvedic medical college Sankeshwar, Karnataka, India.
2. Associate professor, Department of Kaumarbhriya, Parul institute of Ayurveda, Baroda, Gujarat, India.
3. Assistant professor Department of Swasthvritta, SGV Ayurvedic college Bailhongal, Karnataka, India.
*Corresponding author: drvinay.galatage03@gmail.com

Abstract-
Hand, foot and mouth disease usually affect infants and children. It is viral disease characterised by a brief febrile illness and typical vesicular rash. In rare cases, patients may also develop neurological complications. It is moderately contagious and is spread through direct contact with the mucus, saliva, or feces of an infected person. It typically occurs in small epidemics, usually during the summer and autumn months. The incidence of hand, foot and mouth disease has recently been on the rise in India due to the probable mass immunization programs. The disease affects more than one family member and often takes a toll of epidemic situation. The modern management offers only symptomatic relief along with antiviral medicines whose indications are limited to severe cases. This report describes a prolonged case of hand foot and mouth disease from Kolhapur, central India, managed through ayurvedic remedies like Paripathadi kadha, Shatdhout ghrut and Kumari.ayurvedic remedies.Where it shows better improvement in healing of lesions in short duration.

Keywords- Hand foot mouth disease, vesicular rash, Paripathadi kadha, Shatdhout ghrut

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 Coxasackie A16 or enterovirus 71. The disease peculiarly affects children less than 10 years of age. It rarely affects in adult. It typically occurs in small epidemics, usually during the
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 3 to 6 days.\(^2\)

Clinically, the condition is characterized by a combination of exanthems and enanthems followed by one or more episode of fever, here exanthem means eruption of skin and enanthem means eruption of mucus membrane.\(^3\)

Early symptoms are likely to be fever often followed by a sore throat. Loss of appetite and general malaise may also occur. Between 1 and 2 days after the onset of fever, painful sores (lesions) may appear in the mouth or throat. A rash may become evident on the hands, feet, mouth, tongue, inside of the cheeks and also the buttocks, knees and elbow. Oral lesions appears as lesions, which rapidly ulcerate producing multiple small superficial ulcers. The ulcers are usually seen on the tongue, palate, buccal mucosa, gums and lips. Oral ulcers cause discomfort, making oral feeding difficult.\(^4\)

### Aims and Objective-

**Aim:**
To study the role of ayurvedic drugs in the management of prolonged Hand foot Mouth disease in children.

**Objective:**
To evaluate the role of ayurvedic drugs like *Paripathadi kadha*, *Shatdhout ghrut* and *Kumari* in the management of prolonged Hand foot Mouth disease.

#### Case report-

A 1-year-old male child was brought to the OPD by his parents with complaints of fever and skin rashes for a period of 3 days. On general examination there were multiple eruptions over the hand, feet, knee, elbow and buttocks. Child was irritable. Skin eruptions were around 2 mm in diameter and filled with clear fluid. The oral ulcers were distributed mainly on the labial mucosa of lower lip. The ulcers were around 2 mm in diameter, irregular in shape, covered reddish halo and yellow base. Lip was oedematous. Based on the clinical features a provisional diagnosis of HFMD was made.

Prescribed calamine lotion to be applied 3 times a day and paracetamol syrup given 3 times a day for 5 days.

The patient was revived after 5 days. But there is no relief in lesion was seen and fever was intermittent. At that time lab investigations were done which showed normal values. Dermatological opinion taken and started Amoxclav and oral steroid for 3 days. Fever was intermittent, child was irritable and didn’t notice any improvement in lesions after 3 days of medicines. So thinking of prolonged case of HFMD, patient was given internally *Paripathadi kadha* \(^5\) 2.5ml OD for four days, *Kumari* pulp and *Shatdhout ghrut* were applied externally on lesions alternately 4 times a day for four days. Patient was reviewed after 4 days, general condition of a child was improved, irritability was decreased and
healing of the lesions was noted in all previously reported sites.

Materials and method-
For the present study following material were used.
Paripathadi kadha - 1 bottle, 2.5ml OD for four days
Kumari pulp - Q.S
Shatdhaut ghrut - Q.S were applied externally on lesions alternately 4 times a day for four days

Result –
Patient was having eruptions over the hand, feet, knee, elbow and buttocks and oral mucosa for almost 10 to 12 days and child was irritable. After treatment of Paripathadi kadha internally along with Kumari pulp and Shatdhaut ghrut application for four days. Healing of the lesions was noted in all the sites. Child started his day today activities without irritability.

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 dhatu 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 dhatu and pain is due to Vata and redness with fever is due to Pitta.

Paripathadi kadha is an ayurvedic proprietary medicine which contains Paripatha, Gulabkali, Raktachandana, Yashhtimadhu, Guduchi, Draksha, Haridra, Sonamukhi, Dhanyak, Siraka, Vasa, patola, Dhamasa, Khairsal, Musta, Ushira, Kirattikta, Katuki, Neem, Pittapapada, Dhataki etc. Most of the ingredients of Paripathadi kadha are tikta rasa pradhan and sheet viryatmak having properties of Rakta pittahara, Daha hara. So it helps in reducing the vitiated pitta and rakta, also acts as a daha prashmana.

Shatdhauta ghrita acts as a wound healing activity and twak prasadak in lesions.

Aloe vera leaves pulp has faster wound healing capacity also protects affected surface from getting infected by microbes. Aloe vera is reported to enhance collagen turnover rate in wound tissue.

Aloe vera gel if topically applied significantly increases wound contraction and wound closure. It has a significant influence on the level of collagen, which acts as the precursor protein for wound healing. Histological studies reported that Aloe vera gel accelerates epithelialization, neo-vascularization and increased wound contraction in the later stage of the wound healing process.

Conclusion-
Hand, foot and mouth disease usually affect infants and children. 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 which 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, Kumari pulp, Shadhdaut ghrut etc. should be used in large number of cases.

Pictures:

Before treatment

After treatment:

References -
1. Inamadar Arun, Textbook of paeditric dermatology 2nd ed Jaypee publications, New Delhi, page 207-208
2. Inamadar Arun, Textbook of paeditric dermatology 2nd ed Jaypee publications New Delhi, page 207-208
3. Vinod k Paul, Arvindbaggha: Ghai Essential pediatrics, 8th ed. Page 219-220, CBS publishers, New Delhi 2013, Page 219-220.
4. Kliegman, Nelson textbook of paediatrics vol-1 21 ed. Elsevier publication Page 1692-1693
5. Sudha Singh, Deepak S Khawale: Hand-Foot And Mouth Disease: An Ayurvedic Perspective, International Ayurvedic Medical Journal Volume 3; Issue 4; April-2015
6. 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

7. Suwarna Govind Patil, Mangesh L. Patil, “Effect of shatadhatta ghrita local application on yonigat sadya vran with special reference to episiotomy wound – a case study.” Ayurlog National Journal of Research in Ayurved Science-

8. Chithra P, Sajithlal GB and Chandrakasan G. “Influence of Aloe vera on collagen turnover in healing of dermal wounds in rats.” Indian Journal of Experimental Biology, Vol. 36, No. 9, 1998, pp. 896-901.

9. Yadav, Haritha K.C., et al. “Wound healing activity of topical application of Aloe vera gel in experimental animal models.” International Journal of Pharma and Bio Sciences, Vol. 3, No. 2, 2012, pp. 63-72.

Conflict of Interest: Non

Cite this article: "Hand, foot and mouth disease – management through Ayurveda – a short case report."

Vinayak Galatage, Swapnil V., Rashmi Moogi

Ayurlog: National Journal of Research in Ayurved Science- 2021; (09) (01):01- 05

Source of funding: Nil