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## AYURVEDIC MANAGEMENT OF FEVER WITH EXANTHEMATOUS RASH IN CHILDREN- A CASE REPORT

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### ABSTRACT

**Background:** Fever with exanthematous rash is common in childhood and a cause of anxiety among parents. These infectious exanthematous diseases range from mild infections that disappear naturally to severe infectious diseases. Many of them are benign viral exanthemas without much clinical significance. Fever is most common presenting complaint in this types of infections. Although established paracetamol has good antipyretic effect but it does not correct cause of fever, where as in *samhitas* mentioned that properties of *Amruttotar kashaya* are not only *jwarghna* but also has properties that may affect the cause of *jwara*. In present case study a *Amritottar kashaya ghan vati* was prepared and used as symptomatic antipyretic agent.

**Materials and Methods:** *Amritottar kashaya ghan vati* were prepared in Late Kedari Redekar Ayurveda GMP pharmacy and was used in patient having fever with exanthematous rash.

**Results:** Significant antipyretic activity of *Amritottar kashaya ghan vati* was noted in present case

study with dose of 2 tablets (500mg each) in TDS. Significant results were observed in reduction of fever spike and duration of fever.

**Discussion and Conclusion:** *Amritottar kashaya ghan vati* is the combination having the drugs with *katu and tikta rasa* predominant. This *kashaya* possesses the property of *Deepana, Paachana,* and *Anulomana* and thereby helps in treating all types of *Jwara* with exanthematous rash and can be used in day to day clinical *Ayurveda* practices.

**Keywords:** *Amritottar kashaya ghan vati , Fever, exanthematous rash*

## INTRODUCTION

Infectious diseases are still one of the leading causes of death in low- and middle-income countries [1]. These infectious diseases are very common in children, in most of them, fever is a presenting symptom [2]. Fever with rash is common among children and are seen by both dermatologists and pediatricians. Most of them are benign viral exanthemas without much clinical significance [3].

Fever with exanthema is common in childhood and a cause of anxiety among parents. Reassurance and supportive therapy are all that is needed in such cases. However, a physician must be attentive of the distinguishing features of the serious illnesses which may be associated with major complications with substantial morbidity and mortality.

Fever is most common presenting complaint in general pediatric population, modern medicine has good number of antipyretic medicine but that doesn't treat the underlying cause [4].

*Ayurvedic* science have described many diseases amongst which *Jwara* stands first, because of its individuality to make everyone suffer, since birth to death. It is said that each and every individual suffers from *jwara* and *jwara* is said to be *Sarvarogagraja* [5]. On the contrary *Ayurveda* have large number of multiple drugs combinations known as *kashaya* for treatment of fever [6]. All the ingredients of different *kashaya* act on the different systems and organs and help to treat or cure the pathogenesis of underlying disease and to reduce the body temperature as well.

Viral exanthemas are common causes of febrile illness in children. Many viral agents are known to cause a rash. Historically, exanthemas were numbered in the order in which they were differentiated from other exanthemas. Thus, the first was measles; second, scarlet fever; third, rubella etc. [7].

In *Ayurveda*, many *vyadhi* are explained where fever and rash are seen simultaneously like *masurika , romantika ,etc . Romantika is*

caused by by *kaph and pitta* vitiation as well as by the consumption of *Kshara, viruddha-katu-amla-lavana aahara atisevana*, as stated in *Madhava Nidana*. Vitiated *tridosha* reacts with *dushita rakta*, resulting in multiple small blisters like masoor daal all over the body.

On the other hand, Measles is a highly contagious, potentially fatal, but vaccine-preventable disease caused by measles virus. Symptoms include fever, maculopapular rash, and at least one of cough, coryza, or conjunctivitis, although vaccinated individuals can have milder or even no symptoms.

## CASE REPORT

**Aim of case study:** To evaluate the efficacy of *Ayurvedic* management of fever with exanthematous rashes in the *Sankramaka roga* (acute infectious disease).

**Type of study:** A case report (Interventional study)

**Study center:** SBSS Krishna Ayurvedic medical college and hospital Sankeshwar

**Study details:** A 8 years old male patient, came to SBSS Krishna Ayurvedic medical college and hospital Sankeshwar in November 2022.

**Chief complaint:** Patient's chief complaint was mild fever since 3 days and skin rash over face, neck and trunk since 1 day.

**Associated complaints** –Body ache and

weakness since 2 days.

**Brief history of present illness:** A 8 year's male patient 1<sup>st</sup> issue of non consanguineous marriage brought by parents with complaints of fever since 3 days. Patient was apparently healthy before 7 days. Patients got mild cough and cold before 5 days, which was subsided by own. After that patient got fever, since 3 days. It was mild to moderate grade and subsided by antipyretic. Along with that patient reported a skin rash since 1 day, rash was maculopapular type started from neck, behind ear and on next day it spreads to trunk. Patient also had body ache since 2 days. It was increased during awake condition. Patient experienced generalized weakness since 2 days. For all above said complaints initially patient taken only self-medications. But when fever and rashes appeared parents brought the patient to our hospital.

**Past history:** cough, cold 5 days ago.

**Family history:** Nothing contributory

**Treatment history:** Tab.brufen junior 1 sos.

**Personal history:** Appetite – Reduced;  
Bowel – Regular (twice a day);

Micturition – 6-7  
times/day (normal);

Sleep – Disturbed; Diet  
– Mixed;

Addiction – nil

**Immunization history-** all the vaccination

was completed till date.

**General examination:** Temperature- 100.5°F, Pulse Rate- 92 bpm, RR- 20/min, BP- 98/70 mmHg

**Inspection:** Skin: Site- All over the trunk and back, started from neck, behind ear

Colour- reddish, Discharge- absent, Type of rash -maculopapular

**Ashtasthana pareeksha:**

Nadi – 92 bpm,

Mala –nirama,

Mootra – prakruta

Jihva – lipta

Shabda – spashta

Sparsha – ushna,

Drika –prakruta (daha yukta netrata),

Akruti – prakruta

**Dashavidha pareeksha:**

Pakruti – vatakaphaja,

Vikruti – romantika like condition

Sara – madhyama,

Samhanana – madhyama,

Satwa – pravara,

Pramana –madhyama,

Aahara Shakti – avara,

Vyayama Shakti – avara,

Vaya –bala,

Satmaya – madhyama

**Nidana panchaka:**

Hetu – katu, amla, lavana rasa aahara adhika sevana,

Poorvaroopo – kaas, manda jwara

Roopa – jwara, pidaka

Samprapti – nidana sevana-pitta prakopsthana sanshraya-Twaka gata adhishtana - jwara, vivarnata, pidaka

**Samprapti ghataka –**

Dosha- (Pitta)

Dushya- (RasaRakta-Twaka)

Agni-(Mandagni)

Ama-(Sama)

Srotas- (Rasavaha-Raktavaha)

Srotodushti- (Vimargagamana)

Udbhava-Sanchar-Vyakta sthana

(Pakvashaya- Sarvashareera-Twaka)

Rogamarga (Bahya).

**Vyavachedaka nidana:** Romantika ,Masoorika

**Diagnosis:** Romantika (Fever with exanthematous rash)

**Intervention:**

**Internally** -Amritottar kashaya ghan vati 500mg - 1-1-1 x 5 days

- ORS (sos)

-Vitamin A capsule-2 lakh unit.

Table 1: Content of Amritottar kashaya ghan vati -

Drug	Botanical name	Parts used	Proportion
Guduchi	Tinospora Cordifolia	Kanda	6 parts
Haritaki	Termenalia Chebula	Phala	4 parts
Shunthi	Zinziber Officinale	Rhizome	2 parts

**Externally** – *Nimba patra Jala snana* once a day

*Shatdhout ghruta* over rash thrice a day for 5 days.

**Aahara** – *Akruta Krushra-Mugda yusha, SaindhvaLavana, Dugdha*, cooked *Shaaka* in little *taila/ ghruta* added over it, coconut

water, was recommended, excluding all the *Apathya* (as per classics). Hygiene and isolation was recommended for avoiding its spread.

**Assessment:** Patient was assessed before and after treatment with clinical symptoms

### OBSERVATION AND RESULTS:

Table 2: Patient temperature chart

Temperature in °F	Day 1				Day2				Day3			
	6hr	12hr	18hr	24hr	6hr	12hr	18hr	24hr	6hr	12hr	18hr	24hr
	99.0	100.5	100.0	99.0	98.5	99.0	100.0	99.0	98.5	98.5	98.5	98.5

Decrease in fever were noted after 1.5 to 2 hours of administration of *Amritottar kashay ghan vati*, Child was afebrile by the 3<sup>rd</sup> day of treatment. Child doesn't required

antipyretic medicines during whole course. And improvement in the general and mental health condition, stated by the patient. By the end of 3-5 days Maculopapular rash were

totally disappeared with the local application of *shatdhout ghrut*. After the completion of 5 days of treatment the symptoms like *daha, kandu*, were completely subsided. After 05 days of treatment patient felt energetic, his appetite was increased and digestion improved.

### Lab investigations –

Table 3

Test	Component	Before Treatment	After Treatment
CBC	TLC	5200	5600
	HB	12.2 gm/dl	12.1 gm/dl
	RBC	3.48 10 <sup>6</sup> /ul	3.44 10 <sup>6</sup> /ul
	Neutrophils	54	46
	Lymphocyte	34	45
	Monocyte	10	06
	Eosinophils	02	03
	Basophils	00	00
	Platelets	165000	155000
	ESR	30mm/hour	06mm/hour
Serology	CRP	11mg/L	03mg/L

### DISCUSSION:

#### Discussion on vyadhi-

*Ayurvedic* literatures consider fever as disease

as well as a symptom. *Jwara* was considered to be the most important of all the diseases because of its attributes to afflict the body, the

mind and the senses. *Agni Dushti* may leads to various types of *Vyadhi* (disease). So, primarily it is important to treat the *Agni Dushti* [8].

Viral exanthemas are common causes of febrile illness in children. More than 50 viral agents are known to cause a rash. Historically, exanthemas were numbered in the order in which they were differentiated from other exanthemas. Thus, the first was measles; second, scarlet fever; third, rubella etc. [5].

In Ayurveda, many *vyadhi* are explained where fever and exanthema rash are seen simultaneously like *masurika*, *romantika*, etc. The word *romantika* is derived from *roma*, which means body hair and *aatank* which means at the end. Skin rash is formed at the base of hair root is *Romantika*, it is contagious/ *Sankramaka Vyadhi*, spreads via air or direct contact with affected person. Isolation and hygiene is a must recommendation. It generally affects children and rarely seen in adults.

Charak the Father of Indian Medicine, has elaborately described Measles under the title of '*Romantika*', and this discussion is present in Ayurveda texts. Rashes are developed by the aggravation of *pitta* and *kaph dosa*. Formation of *romantika* is at the base of the hair root, they are very small in size, adjacent to skin surface are of reddish color and devoid

of secretions .formation of rashes is all over body but dominant at face, back, abdomen. This disease is easily curable by nature [9].

According to *Madhav nidan*, it is a type of *masurika*, here furuncles are developed due to aggravation of *kaph pitta*. *Kaas* ,*aruchi* and *jwara* are seen as a preliminary symptoms [10].

Measles is an important cause of morbidity and mortality among the children of India. It is presumed that almost everyone in India suffers from measles before the age of 10 years. Hospital-based studies have found that 20%-70% of children with measles develop minor and major complications, the mortality rate due to measles is 3%-15%, depending on the health-care system in the community [11]. It is a highly contagious, potentially fatal, but vaccine-preventable disease caused by measles virus. Symptoms include fever, maculopapular rash, and at least one of cough, coryza, or conjunctivitis, although vaccinated individuals can have milder or even no symptoms. These types of symptoms are seen in *saam sannipataj jwara* [12]. Diagnosis relies largely on clinical basis. Patient management mainly involves supportive therapy, such as vitamin A supplementation, monitoring for and treatment of secondary bacterial infections with antibiotics, and rehydration in the case of severe diarrhea.

There is no specific antiviral therapy for the treatment of measles, and disease control largely depends on prevention. So in this area *Ayurveda* can work effectively.

#### **Discussion on medicine /treatment –**

*Amrutottar kashaya ghan vati* is the combination *Guduchi*, *shunthi* and *Haritaki*. *Amrutottar kashaya* from *Sharangdhar Samhita* was taken as the antipyretic medicine. *Amrutottara Kashaya* originally mentioned in *Sahasrayogam* and *Chikitsamanjari* by the name of *Tridosha Jwarahara Kashaya* and *Nagaradi Kashaya* [13] for easy administration *Amrutottatar kashaya* has made in to *ghan vati* form following all SOP [14]. Fever can be seen because of an infection, infestations, inflammation etc. Though there is various causes the antipyretic medicines are universally used in conventional medicines along with the treatment of underlying disease pathology. In modern medicines only supportive treatment is mentioned.

*Amrutottar kashaya* are not only *jwaraghna* but also has properties that may affect the cause of *jwara*. *Jwar roga samprati ghatakas* tells that *Amashaya* is *udhbhav sthan* for *jwar*, *agnidusti* is *mandagni* and *strotodusti* type is *sang*. This *kashaya* possesses the property of *Deepana*, *Paachana*, and *Anulomana* and thereby may help in treating all types of *Jwara*

[15].

#### **Discussion on observation and result –**

**Probable mode of action –** *Jwara* is *mandagni janya vyadhi* and *udhbhav sthan* is *aamashay*. This *kashaya* possesses the property of *deepana*, *paachana*, and *anulomana* and thereby may help in treating all types of *Jwara* [11]. Most of the ingredients having antipyretic, anti-inflammatory and antioxidant properties that may help as antipyretic action. *Nimba patra Jala snana* is act as antibacterial and *Shatdhout ghruta* is act like skin emollient and wound healing, thus helps in reducing exanthema rash.

#### **CONCLUSION:**

It can be concluded that, fever with exanthematous rash can be manage or treated by *Ayurvedic* management in form of *Amrutottar kashaya ghan vati* , *nimba patra snana* and *shatdhout ghrut* with *pathya*. *Amrutottar kashaya ghan vati* can be used as *jwaraghna* (ayurvedic antipyretic).

#### **Adverse drug reaction:**

No any adverse drugs reaction found.

**Key message:** Fever with exanthema is common in childhood and a cause of anxiety among parents. *Ayurvedic* medicines can used effectively in fever with exanthematous rash.

**Conflict of Interest:** None.

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## REFERENCES

- [1] Dye C. After 2015: infectious diseases in a new era of health and development. *Philos Trans R Soc B Biol Sci.* (2014) 369:20130426. doi: 10.1098/rstb.2013.0426
- [2] El-Radhi AS. Fever in Common Infectious Diseases. *Clinical Manual of Fever in Children.* 2019 Jan 2:85–140. doi: 10.1007/978-3-319-92336-9\_5. PMID: PMC7122655.
- [3] Sarkar R, Mishra K, Garg VK. Fever with rash in a child in India. *Indian J Dermatol Venereol Leprol* 2012; 78:251-262
- [4] Galatage VG, Antipyretic Effect of Amrittottar Kashaya Ghan Vati Inthe Management of Fever –A Pilot Clinical Study *IJBPAS, March, Special Issue, 2022, 11(3): 849-859*
- [5] Charak samhita, Text with English translation. Editor-translator Prof. Priyavat Sharma.vol-2, Chaukhamba Orientalia, first edition 2000, Varanasi. *Cikitsasthanam* 3/13 p.52
- [6] Detroja S and d Raskar SC, Febrikid - An Ayurveda Antipyretic – A Clinical Trial, *IJBPAS, March, Special Issue, 2022, 11(3): 638-650*
- [7] El-Radhi AS. Fever in Common Infectious Diseases. *Clinical Manual of Fever in Children.* 2019 Jan 2:85–140. doi: 10.1007/978-3-319-92336-9\_5. PMID: PMC7122655.
- [8] Jyani HP, Dahilekar SG, Dahilekar H and Malviya G , To Elaborate The Concept Of Agni Dushti In The Pathogenesis Of Various Disorder – A Review, *IJBPAS, March, Special Issue, 2022, 11(3): 406-416*
- [9] Charak samhita –hindi cpmmentry by Tripathi B choukhba surbhathi prakashan, Varanssi vol 2<sup>nd</sup> edition 2020 ,12/92 pg 463
- [10] Madhav nidan – Upadhya Y, Editor Madhav Nidana of shri Mahavkara, Madhukosh Sanskrit commentary by Vijayrakshit and Hindi commentary and notes by Sudarshan Shastri, Madhav Nidan, 2<sup>nd</sup> edition reprint 2018, choukhba prakashan, Varanssi 54/13 pg 222
- [11] Dave KH. Measles in India. *Rev Infect Dis.* 1983 May-Jun;5(3):406-10. doi: 10.1093/clinids/5.3.406. PMID: 6878990.
- [12] Mamidi P, Gupta K (2017) Sama Sannipata Jwara- Sepsis, *Sirs, Mods,*

- Septic Shock and Delirium. *Int J Complement Alt Med* 8(2): 00257.  
DOI: 10.15406/ijcam.2017.08.00257
- [13] Rao Pandit D B.Sahasrayoga Hindi Translation. New Delhi. Kendriya Ayurvediya Vijnana Anusandhana Parishad; 2011.p.50-51
- [14] Kumar, L., Kumbhar, P., & Patharkar, J. (2021). Pharmaceutical Analysis of Guduchi-Bhadramustadi Ghanvati: An Ayurvedic Formulation for Dyslipidemia. *International Journal of Ayurvedic Medicine*, 12(1), 144–147.  
<https://doi.org/10.47552/ijam.v12i1.1808>
- [15] Rao Pandit D B.Sahasrayoga Hindi Translation. New Delhi. Kendriya Ayurvediya Vijnana Anusandhana Parishad; 2011. P .50-51