

Journal of **Ayurveda and Integrated Medical Sciences**

www.jaims.in



An International Journal for Researches in Ayurveda and Allied Sciences



no start

Journal of

Ayurveda and Integrated Medical Sciences

REVIEW ARTICLE

April 2024

Utility of Nirgundyadi Kashaya Yoga in Urinary **Tract Infections in Children**

Rajasree TR

Assistant Professor, Dept. of Kaumarabhritya, Atreya Ayurvedic Medical College, Hospital & Research Centre, Doddaballapur, Banaalore, India.

ABSTRACT

Background: Urinary tract infections are among the most common infections of childhood. The diagnosis of UTI is often missed in infants and young children since symptoms are minimally expressed and non-specific. Younger age, inadequate antibacterial therapy and recurrent infections and delayed diagnosis often lead to further complications. Methods: The symptoms of UTI can be correlated to Mutrakrcchra, which is explained in Samhitas. Acharya Kashyapa had explained in detail Mutrakrcchra in children in Mutrakrcchra Chiktsadyaya. The Nirgundyadi Kashaya Yoga in Sahasrayoga is explained in Kashaya Prakarana and indicated in Krimi Chikitsa. Results: The Yoga is found effectively prescribed in children with UTI. This article analyses the probable mode of action in terms of its Samprapti Vighatana in children. Conclusion: The analysis of the drugs and their therapeutic efficacy in Ayurvedic point of view, which will be elaborated, can aid the validation of practices in the paediatric age group.

Key words: UTI, Mutrakrcchra, Nirgundyadi Kashaya, Samprapthi Vighatana

INTRODUCTION

Urinary tract infections are among the most common infections of childhood^[1] About 2-8% of children suffer from UTI and one- third children with febrile UTI have vesico-ureteric reflux. It is estimated that 2% of boys and 7% of girls have one UTI by 7 years.^[2]

The diagnosis is missed in infants and young children since symptoms are minimally expressed and nonspecific. Over 80% of community -acquired UTI is caused by E. coli. Organisms such as Klebsiella, Proteus, Enterobacter, Staphylococcus and Streptococcus

Address for correspondence:

Dr. Rajasree TR

Assistant Professor, Dept. of Kaumarabhritya, Atreya Ayurvedic Medical College, Hospital & Research Centre, Doddaballapur, Bangalore, India.

E-mail: rajasreetrofficial@gmail.com

Submission Date: 08/02/2024 Accepted Date: 21/03/2024



Website: www.jaims.in

DOI: 10.21760/jaims.9.4.10

faecalis are also identified as the cause for infection.

The symptoms of UTI in younger children are nonspecific and require a high index of suspicion. Recurrent fever, diarrhea, vomiting, abdominal pain, poor weight gain and urinary symptoms such as burning, urgency, frequency, flankpain, turbid urine, recent onset of enuresis are the clinical features.[3]

Younger age, inadequate antibacterial therapy, recurrent infections, and delayed diagnosis often lead to complications. The condition can be almost correlated to Mutrakricchra in Ayurveda. The disease has been extensively explained by Brihatrayees. Dukhena Mutra Pravrrti - any discomfort /difficulty in urination which is pain dominant is understood as Mutrakricchra.

Diagnosis of Mutrakrcchra in infants is explained in Vedanadyaya of Kasyapa Samhitha.[4] Mutrakrcchra Chikitsa Adyaya of Kasyapasamhita explains the types and treatment of Mutrakrcchra as Vata, Pitta, Kapha, Raktaja Dwandaja and Sannipataja.[5]

In all types of Mutrakrcchra - common symptoms are emaciation, uneasiness, anorexia, mood changes, thirst, pain, and depression.[6]

ISSN: 2456-3110 REVIEW ARTICLE April 2024

MATERIALS AND METHODS

Drug review

Nirgundyadi Kashaya^[7] (Sahasrayoga) Yoga which is mentioned in Sahasrayoga. There are 17 ingredients in the Yoga which are the common drugs in various formulations.

Ingredients

Table 1: Ingredients of Nirgundyadi Kashaya^[8]

SN	Drug	Botanical name	Family	
1.	Nirgundi	Vitex negundo	Verbinaceae	
2.	Chitraka	Plumbago zeylanica	Plumbaginaceae	
3.	Vidanga	Embelia ribes	Myrsinaceae	
4.	Devadaru	Cedrus deodara	Pinaceae	
5.	Haridra	Curcuma longa	Zingiberaceae	
6.	Mustha	Cyperus rotundus	Cyperaceae	
7.	Aakhukarni	Merremia emarginata	Convolvulaceae	
8.	Kshapa (Karimthumba)	Anisomelis malabarica	Laminaceae	
9.	Bharngi	Clerodendrum serratum	Verbinaceae	
10.	Shunti	Zingiber officinalis	Zingiberaceae	
11.	Marica	Piper nigrum	Piperaceae	
12.	Pippali	Piper longum	Piperaceae	
13.	Palasha	Butea monosperma	Fabaceae	
14.	Sigru	Moringa oleifera	Moringaceae	
15.	Chavya	Piper brachystachym	Piperaceae	
16.	Haritaki	Terminalia chebula	combratceae	

17. Rasona Allium sativum Liliaceae	
-------------------------------------	--

Rasa Panchaka of individual drugs

Table 2: Ayurveda properties of ingredients^[9]

Drug	Rasa	Guna	Virya	Vipaka	Karma
Nirgundi	Katu, Tikta, Kashaya	Laghu Ruksa	Usna	Katu	Vata Kapha Hara, Krimi, Gulma, Sula, Sopha, Agnikara, Masthishka Baladayaka Rasayana
Chitraka	Katu	Laghu Ruksa Tiksn a	Usna	Katu	Kapha Vata Hara, Dipana, Pachana, Agnikrith
Vidanga	Katu, Tikta	Laghu Ruksa Tiksn a	Usna	Katu	Vata Kapha Hara, Krimi, Agnikrith
Devadaru	Tikta, Kashaya	Laghu Snigd ha	Usna	Katu	Kapha Vata Hara, Jvara, Ama, Vatanuloma na
Haridra	Tikta, Katu	Ruksa Laghu	Usna	Katu	Kapha Pitta Hara, Dipana
Mustha	Katu, Tikta, Kashaya	Laghu Suksh ma	Sita	Katu	Kapha Pitta Hara, Dipana, Jvara, Krimi
Aakhukar ni	Katu, Tikta, Kashaya	Laghu	Sita	Katu	Kapha Pitta Hara, Krimi, Jvara, Pachana
Kshapa (Karimth umba)	Katu, Tikta	Laghu	Sita	Katu	Kapha Vata Hara, Ruchikrt

ISSN: 2456-3110 **REVIEW ARTICLE**

Bharngi	Kashaya, Tikta, Katu	Laghu Ruksa	Usna	Katu	Kapha Vata Hara, Dipana, Pachana Jvara, Raktadosa Hara
Shunti	Katu	Laghu Snigd ha	Usna	Madhu ra	Jirnajwara, Aruci, Vedanastha paka
Marica	Katu, Tikta	Laghu Ruksa Tiksn a	Usna	Katu	Dipana, Sulaghna, Krimi
Pippali	Katu	Laghu Snigd ha Tiksn a	Usna	Madhu ra	Dipana, Jwara, Pachana
Palasha	Kashaya, Katu, Tikta.	Laghu Snigd ha	Usna	Katu	Dipana, Krimi
Sigru	Katu	Laghu Ruksa Tiksn a	Usna	Katu	Sula, Sotha, Krimi
Chavya	Katu	Laghu	Usna	Katu	Kapha Vata Hara, Dipana, Krimi

DISCUSSION

Yoga on analysis shows predominantly Laghu, Ruksa Guna; Katu, Tikta, Kashaya Rasas; Usna Virya; Katu Vipaka; Kapha Vatahara, Dipana, Pachana and Krimihara in action.

The Lakshanas of simple UTI can be correlated more to Kaphadika Mutrakrcchra Lakshanas which includes white and thick urine in excess quantity with mild discomfort associated with heaviness and inflammation of Basti.

The vitiated Kapha Pradhana Tridoshas along with the state of Agnimandya invariably produce Ama. The

April 2024

Sama Dosha produces symptoms such as yellowish urine, burning micturition, turbid urine etc. The Rasapanchaka of the Yoga shows its capability to break the Samavastha of Doshas and show significant relief in the symptoms. Thus, the Krimihara Yoga can be effectively used as anti-infective therapy.

CONCLUSION

The critical analysis of the Yoga offers scope to research works on the clinical efficacy of Nirgundyadi Kashaya in UTI. The Rasapanchaka evaluation explains the Samprapti Vighatana of Mutrakrcchra. Further clinical trials can be carried out to identify the effect of the yoga in specific bacterial colonies. Kashayas can be administered as Sharkara Kalpanas for palatability and easier administration in paediatric age group. This may enhance the acceptability of the medicine in clinical practice in the field of Kaumarabhritya.

REFERENCES

- 1. Parthasarathy A.et al. IAP Textbook of Paediatrics, 5thed. Gwalior: IAP National Publication House; 2013.P.825
- 2. Gupta Piyush. PG textbook of paediatrics,2nd ed. Newdelhi: Jaypee the health sciences publisher; P.2373
- 3. Gupta Piyush. PG textbook of paediatrics,2nd ed. Newdelhi: Jaypee the health sciences publisher; P.2373-
- 4. Tewari P V. Kasyapa samhita sutrasthana; vedanadyaya: Chaukhamba chapter 25, Verse.21 Varanasi: viswabharati; 2018. P.55.
- PV. Tewari Kasyapa samhita chikitsastha: Mootrakricchra Chikitsita Adhyaya: chapter 10, Verse 2-5. Varanasi: Chaukhamba viswabharati;2018. P.203.
- PV. Tewari Kasyapa samhita chikitsastha: Mootrakricchrachikitsitaadyaya: chapter 10, Verse 6. Varanasi: Chaukhamba viswabharati;2018. P.203.
- 7. Krishnan K.V,Gopalan Pillai A.K. Sahasrayogam, 32nded. Kashaya Prakarana, verse 2. Aleppy: Vidyarambam publishers; 2013. P.54.
- Sastry J.L.N. Illustrated Dravyaguna Vijnana, Study of the Essential Medicinal Plants in Ayurveda, Varanasi: Chaukambha Orientalia; 2010(II); P.411, 314, 318, 507, 53, 551, 861,422,519,448,452,144,139,574,209,531.

ISSN: 2456-3110 REVIEW ARTICLE April 2024

9. Sastry J.L.N. Illustrated Dravyaguna Vijnana, Study of the Essential Medicinal Plants in Ayurveda, Varanasi: Chaukambha Orientalia; 2010(II) .P. 411,314,318,507, 53,551,861,422,519,448,452,144,139,574,209,531.

How to cite this article: Rajasree TR. Utility of Nirgundyadi Kashaya Yoga in Urinary Tract Infections in Children. J Ayurveda Integr Med Sci 2024;4:69-72. http://dx.doi.org/10.21760/jaims.9.4.10

Source of Support: Nil, **Conflict of Interest:** None declared.

Copyright © 2024 The Author(s); Published by Maharshi Charaka Ayurveda Organization, Vijayapur (Regd). This is an open-access article distributed under the terms of the Creative Commons Attribution License (https://creativecommons.org/licenses/by-nc-sa/4.0), which permits unrestricted use, distribution, and perform the work and make derivative works based on it only for non-commercial purposes, provided the original work is properly cited.