

A REVIEW ON AYURVEDIC CONCEPT OF KRIMI & ITS MANAGEMENT BY
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ABSTRACT

In Ayurveda many *acharyas* mentioned the term of *Krimi* and most at the author described the etiology (*samuthana*), location (*sthana*), farm (*sansthan*), colour (*varna*), name (*name*), effect (*prabhava*), treatment (*chikitsa*) of the *Krimi*. Ayurvedic physicians were well aware about *Krimis* & *Krimirog*. *Krimi* are classified into two groups *Bahya* & *Abhyantar Krimi*. *Abhyantar krimi* are further sub classified in to three groups-1.*Raktaj* 2.*Kaphaj* 3.*Purisaj* And Acharya charaka has described three folded treatment of *Krimirog*. *Apakarshan*, *Prakritivighata* and *Nidanparivarjana*. Soil transmitted Helminth infaction are among the most common infections worldwide and affect the poorest and most deprived communities. They are transmitted by eggs present in human faeces which in turn contaminated soil in areas where sanitation is poor. The main species that infect people are the roundworm (*Ascaris lumbricoides*), the whipworm (*Trichuris trichura*) an the Hookworm(*Necator americance*).In 2016, 38 countries have reached the world helth assembly's target of treating at least 75% of school aged children for the disease.

KEYWORDS: *Krimi*, Worms, Helminthis.**INTRODUCTION**

In Ayurveda several *nidanas* has mentioned for development of *krimi* (microbes) in human body like *Ajirna* (indigestion), *Adhyashana* (eating before the previous meal has been digested), *Asatmyaahara*, *Virudhasana*, *Malinasana* (incompatible or unhygienic meal sedentary habit), *Avyayam*, *Diwaswapna* (sleeping during the day), *Guru* (heavy), *Atisnigdha* (very fatty), *Atisheet Ahara-Vihara* (cold food) and, excessive use of *Masa*, *Pishthanna* (pasted food), *Dal*(legumes), *Mrinaal Kand* (stalk and root of lotus), *Sura* (wine), *Dhadhi* (yoghurt), *Dugdha* (milk), *Guda* (jaggery), *Sirka* and *Tilkalka* (sesamum cakes) *Anupmansa* (minced food of swampy animals), *Pinyaka*, *Prithuka* and *Ekshurasa* (sugarcane juice) and *Madhura* (sweet) and *Amla* (sour) liquid drinks lead to the excitation of *kapha* and *pitta* which in turn produce worm of various type and sizes at different sites in the body.^[1]

Krimis (parasites) are spoken of as two kinds. viz *bahya* (external) and *abhyantara* (internal). These are of four kinds - as arising from external dirt, *kapha*, *asrika* (blood) and *mala* and twenty kinds by name.^[2]

In modern medical sciences there is separate branch for worm and microbes i.e. Helminthology and Microbiology.

Acharya charaka has described three folded treatment of *Krimi roga*.^[3]

1. *Apakarshana means:-* To eliminate the *dosha*, *mala* and *krimi sanghaata* forcefully.
2. *Prakriti vighaata means:-* distraction of susceptible environment of *Krimi*.
3. *Nidan parivarjana means:-* Avoid the causative factor.

Aims and Object

- To review on basic concepts of *krimiroga*.
- To review on *Krimi roga* management by *pathya* *apathya*.

Origin and Type^[4]

The organisms thriving upon *kapha*, *mala* and *asrika* usually originate in the stomach and the small intestine, colon and inside the blood vessels respectively.

The twenty species of worms originating from the three sources *Kapha*, *Mala* and *Asrika*.

Types^[5]

According to their source *Krimis* are of four kinds

1. They are born of *Mala*
2. They are born of *Kapha*
3. They are born of *Asrika*
4. They are born of body excretion

Then are again classified in four groups namely

1. *PURISHAJA*
2. *SLESHMAJA*
3. *SHONITAJA*
4. *MALAJA* (ch.vi.7/9)

Dietry Origin^[6]

Faecal Origin:- Excessive consumption of :- *Masa*, *Pisthanna* (pasted food), *vidala* (legumes) and *Parnashaka* (leafy vegetable).

Kaphaja Origin:- Habitually eating meat, *Masa*, *Guda* (jaggery), *Dugdha* (milk), *Dadhi* (yoghurt), and *Tail* (oil).

Haematogenous Organisms: Product by incompatible, diets, indigestion and unwashed, leafy, vegetables.

Table 1: Nomenclature of Krimi In Samhita.

NO	Types Of Krimi	Charak samhita viman ^[7]	Sushruta samhita ^[8]
1.	BAHYA KRIMI	<i>Yuka, Liksha</i>	—
2.	KAPHAJA KRIMI	<i>Antrada, Udarada, Mahaguda, Hridyachara, Mahaguda, Churu, Darbhapushpa, Sugemdhika.</i>	<i>Darbhapushpa, Mahapush Papraloon, Chipita, Pippalika, Daruna.</i>
3.	RAKTAJA KRIMI	<i>Keshada, Lomada, Lomadvipa, Sourasa, Udumbara, Jantumatra.</i>	<i>Keshada, Romada, Nakhada, Dantada, Kikkisha, Kushtaja, Parisarpa.</i>
4.	PURISHAJA KRIMI	<i>Kakeruka, Makeruka, Leliha, Sashoolaka, Shausurada</i>	<i>Ajwa, Vijawa, Kipyra, Chipya, Gandupada, Churu, Dvimukha.</i>

Krimi Roga Samprati Chakra^[25]

Intake of vishista nidana sevana

(*Masa*, *Dugdha* (Milk), *Dadhi* (Yoghurt), *Guda* (Jaggery), *Madhur* (Sweet), *Amla* (Sour))

Tridosh prakupita(kaphaj pradhan)

Mandagni

Asamyaka pachana

Ajirna

Krimi roga uttpatti(Bahya & Abhyantara)

Samprapti Ghataka of Krimi Roga.^[9]

DOSA- Tridosaja (kapha pradhana)

DUSYA-Dhatu-Rasa, Rakta, Mamsa, Meda, Asthi, Majja

Upadhatu- Sira, Twacha, Snayu

Sarira ka mala- Purisa, Mutra

Dhatu mala-Kapha, Kesa, Loma, Nakha

Agnidusti- Mandagni

Srotas- Purushvaha, Annavaha, Raktavaha, Mamsavaha, Swedavaha

Srotodusti- Sanga,

Udbhavasthana- Amasayottha & pakvasayottha

Adhithana- Amapakvasaya, Dhamni, Tvacha

Vyaktasthana- Guda, Tvacha, Mukha

Svabhava- Chirakari, Asukari

Ryaoga Bheda- Bahya, Abhyantara

Sadhyaashadhyata-Shadhya

General Clinical Features^[10]

- *Jwara* (Fever)
- *Vivarnata* (Discoloration of the body)
- *Shula* (Pain in the abdomen)
- *Hridroga* (Heart disease)
- *Bhrama* (Giddiness)
- *Bhaktadvesha* (Aversion to food)
- *Atisara*(Diarrhea)^[10]
- *Sadan* (Malaise)

Table 2: Nomenclature, Morphology And Clinical Manifestation.^[11]

KRIMI	MALAJA KRIMI	RAKTAJA KRIMI	SLESHMAJA KRIMI	PURISHAJA KRIMI
SAMUTHAN (ETIOLOGY)	<i>Mrijavarjanam</i> (Lack of cleanliness)	<i>-Kusthe samanam</i> (Causing-dermatosis) -ingestion of incompatible food -uncoated vegetable	<i>Kshir, Guda, Tila, Matsya Anupmansa, Pisthanna, Kusumbha Sneha, Ajirna, Durgandhi, Klinna Sankirna Asatmya Ahara.</i> (milk, Jaggery, Sesamum, fish, meat, flour, rice cooked in milk, oil of sunflower uncooked stale, infected items)	Intake of foods prepared from <i>mansa pistanna</i> pulses and leafy vegetable.
STHANA (HABITAT)	<i>Kesh, shamshru,loma,</i>	<i>Raktavahi dhamni</i> Blood carrying	<i>Amasaya</i> (stomach), when developed they	<i>Pakvasaya</i> when loped they move towards. <i>Amasaya</i> then the

	<i>pakshma vasansi</i> (Hairs, beards small hair, eye lashes and clothing)	vessels	move upwords or dounward or both ways.	eructation and breath of the patient produce fecal odour.
SANSTHANA (FORM)	<i>Sookshma, Tilakriti, bahupaad</i> (Minute, til- shped, and multipede)	<i>Anu Vritta, Apadaha</i> (Minut, round, having no pedicle)	- <i>Prithu or Visal</i> (Tape Like) - <i>Vritta</i> (Round Like) - <i>Gandupada Akriti</i> (Earthworms) - <i>Anu</i> (Some Are Small), - <i>Dirgha Tantvaakara</i> (Long Threadlike).	- <i>Sukshma Vrittaparinaha, Dirgha Unasusankasam Some Are Sthul Vrittaparinaha</i> -(Round Like Some Are Small, Long Threadlike.)
VARNA (COLOUR)	<i>Krishna or shukla</i> (black or white)	<i>Tamra Varna</i> (Coppery red)	- <i>Sweta Tamra Avbhas</i> (some are white and broad. Tape like -some are round like earth worm, white and coppery, thread like and white).	<i>Shwet, syaw, nil, harit, pitta</i> (These are white in color blackish, blue green and yellow)
NAME	<i>Yuka And Pipilika</i> (Lice And Nits)	1. <i>Kesada,</i> 2. <i>Lomada</i> 3. <i>Lomadvipa,</i> 4. <i>Sourasa,</i> 5. <i>Audumbara</i> 6. <i>Jantumatra</i> (Charak) 1. <i>Kikkisa,</i> 2. <i>Kusthaja</i> 3. <i>Parisarpa</i> ¹² (Susruta)	- <i>Untrada,</i> - <i>Udarada,</i> - <i>Hridayachara,</i> - <i>Churu,</i> - <i>Darbhapuspa,</i> - <i>Sougandhika,</i> - <i>Mahaguda.</i>	<i>Kakeruka, Makeruka, Leliha, Sasuluka, And Sousurada</i> (By <i>Charak</i>) - <i>Ajava, Vijava, Kipyra, Chipya, Gandupada, Churva, And Dvimukha.</i> ^[12]
PRABHAVA (CLINICAL FEATURES)	<i>Kandujanana koth, pidika</i> (Itching, production of wheals, pimple on the body)	<i>Kesh Sramsua, Nakha, Loma Pakshma, - Vidwanse</i> (Destruction of the hair on the head, face and body, nails and eye lashes) - <i>Harsha</i> (Hypersthesia) - <i>Kandu</i> (Itching) - <i>Toda</i> (Pricking pain)	- <i>Hallas</i> (Nousea- Salivation) - <i>Ashyasansravan</i> (Anor exia) - <i>Arochaka</i> (Indigestion) - <i>Jwar</i> (Fever) - <i>Murchha</i> (Fainting) - <i>Jrimbha</i> (Yowning) - <i>Chavathu</i> (Sneezing) - <i>Angamarda</i> (Body Ache) - <i>Anaha</i> (Hardness In Bowels) - <i>Chardi</i> (Vomiting) - <i>Parusya</i> (Emaciation)	<i>Purishbheda, Karsya, Parusyam, Lomaharsha, Gud Mukhamatoda, Gudmukham Paryasate, Jat harsa, Gudniskraman Ativellam.</i> (Diarrhoea, Emaciation, Dryness. -when they reach rectum, they produce, piercing pain and itching in the anal region, pain in the abdomen, dyspepsia anaemia constipation, nousea loss of test, heart disease)
CHIKITSA (TREATMENT)	<i>Apkarshana malopghat</i> Removal of the dirt on the body and avoidance of conditions leading to the formation of excretion	<i>Kusthe samanam chikista.</i> (<i>Raktamokshan and virechana chikitsa like kustha</i>)	-	-

Table 3: Following The Total Number Of *Krimi* According To Their Sites Are Mentioned In Different Ayurvedic Classics.

NO	NAME OF THE TEXT	<i>Bahya Or Malaja Krimi</i> (External)	<i>Abhyantara krimi</i> (internal)			Total No. of <i>krimi</i>
			<i>Kaphaja</i>	<i>Raktaja</i>	<i>Purishaja</i>	
1.	<i>CHARAKA SAMHITA</i> ^[13]	2	7	6	5	20
2.	<i>SUSHRUTA SAMHITA</i> ^[14]	-	6	7	7	20
3.	<i>VAGBHATA</i> ^[15]	2	7	6	5	20
4.	<i>MADHAHA</i> ^[16]	2	7	6	5	20

Table 4: Showing the site of *krimi* as mentioned in *brihatrayi*.

NO.	TEXT	MALAJA	RAKTAJA	KAPHAJA	PURISHAJA
1.	<i>CHARAKA SAMHITA</i> ^[17]	KESHA, SHAMASRU LOMA, MALIN VASTRA,	RAKTAVAHINI DHAMANI	AMASHAYA	PAKVASHAYA
2.	<i>SUSHRUTA SAMHITA</i> ^[18]	-	DHAMNI	AMASHAYA	PAKVASHAYA
3.	<i>ASTANGA HRIDAYA</i> ^[19]	KESH, LOMA	RAKTA VAHI SIRA	AMASHAYA	PAKVASHAYA

***Pathya And Apathya* (Salutary And Unsalutary Diets)**
Pathya Ahara^[20] Obviously *Katu* (better) and *Tikta* (pungent) meals are beneficial in these cases alkaline drinks with *kulattha kshara* are also advantageous.

Katu rasa ahara^[21]

- *Shigru* - *moringa oleifera*
- *Rasona* - *allium sativum*
- *Gugglu* - *commiphora mukul*
- *Ginger* - *zingiber officinale*
- *Parnas* - *mentha spicata*

Tikta rasa ahara

- *Haridra* - *curcuma longa*
- *Kutaja* - *halarrheria antidysentrika*
- *Karvellak* - *momordica charantia*
- *Vartaku* - *solanum melongena*

Pathya Vihar^[22] *Vamana, Virechan, Shirovirechana, Asthapan Basti, Dhumpan, Abhyanga, Lep, Usadana.*

Apathya Ahara^[23] The patient desirous to be cured of the parasitic infestation should avoid taking all types of

- *Dugdha* (Milk)
- *Mansa* (Meat)
- *Ghruta*
- *Dadhi* (Yoghurt)

All sour, sweet and cold substance.

Apathya Vihar^[22] *Vegvidharana, Vamana Veg Vidharana, Divaswapna.*

CONCLUSION

Krimi roga is not a new disease because it was mentioned in old *samhita* period. *Krimi roga* is correlated with Helminthology in modern science. *Krimiroga* mainly seen in rural area specially children are affected because children eating infected food and play in infected areas so results worm infection like diarrhea dysentery house illness through malnutrition including vitamin deficiency, anemia, protein energy

malnutrition. Management of *Krimiroga* described by text of Ayurveda are step by step But rural people are less aware of worm, which make them sick from the worm.

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