

“Review on Ayurvedic Concept of Purishaja Krimi W.S.R to Gandupada Krimi”

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Abstract

The most common infection among pediatric problems is the worm infestation especially parasitic infestation caused by *Ascaris lumbricoides*. In *Ayurveda* worm infestation is described as *Krimi roga*. *Purishaja krimi* can be correlated to helminths and *Gandupada krimi* can be correlated to the Giant Intestinal round worm *Ascaris lumbricoides*. *Ayurveda* science of life has explained various aspects of *krimiroga*. This article is regarding *Ayurvedic* perspective of *purishaja krimi* W.S.R to *Gandupada krimi*.

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Introduction

The term *krimi* is frequently used in *Ayurvedic* classics. Description of *krimi* is found from vedic period to *Samhita* period. *Krimi roga* is considered to be epidemic and *krimi* is a causative factor for various pathological conditions, *krimi* can be classified on the basis of their origin as *kaphaja krimi*, *raktaja krimi*, *purishaja krimi* ^[1], those which originate in *pakvashaya* are considered as *purishaja krimi*. *Ajava*, *vijava*, *kipy*, *chipy*, *gandupada*, *churu*, *dvimukha* are varieties of *purishaja krimi* ^[2]. *Nidana* for *purishaja krimi* includes consumption of black gram, crushed rice, pomegranate, green leafy vegetables ^[3]. *Shula*, *agnimandya*, *pandu*, *Vishambha*, *bala* *kshaya*, *Praseka*, *aruchi*, *Hridroga*, *Vidbheda* are *purishaja krimi* *lakshan* ^[4]. *Surasadi gana dravya* (*Surasa*, *shwetasurasa*, *Rajika*, *Vidanga*, *Nirgundi*, *Bharangi*, *Kataphala* etc.), Food with *tikta*, *katu rasa* *dravya*, *Kulatha* *kshara* *paana* are considered as wholesome for *krimiroga*. Milk, meat, ghee, curd, green leafy vegetables, food with sour and sweet taste, cold food items are unwholesome for *krimiroga*. This article describes *Ayurvedic* perspective of *purishaja krimiroga*.

Classification of Krimi

- According to site of the body
 - *Bahya* (External)
 - *Abhyantara* (Internal)
- According to effect on the body
 - *Sahaja* (Nonpathogenic)
 - *Vaikarika* (Pathogenic)
- According to source of origin
 - *Malaja* (*Bahya*)- originated from *bahya mala* (*Sweda*)
 - *Raktaja*- originated from blood vessels (*Dhamani*)
 - *Kaphaja*-originated from *Amashaya* (stomach)
 - *Purishaja*-originated from *Pakvashaya* (Large intestine)
 - *Gandupada krimi* comes under the classification of *abhyantara*, *vaikarika* and *purishaja krimi*

Gandupada Krimi-Nirukti

- *Gandu*- knot; *pada*-foot (*Shabda sagara*)
- Meaning- small worm, insect with knotted limbs (*Shabda sagara*)

- “*kinchulake godhika same*” (Amarakosha)
- Meaning-similar to godhika (Lizard)
- According to Monier-Williams-a kind of worm, earthworm

Gandupada Krimi-Paryaya, Akruti, Varna, Sthana^[4]

- Paryaya:** *Maheelata, Kinchuluka*
- Akruti, Varna:** *Deergha, Rakta varna*

- Sthana:** *Pramukha sthana:Kshudantra Sankramana to Amashaya, Yakrit, Puphusa*

Gandupada Krimi Nidana

Acharya Charaka has mentioned specific etiological factors for *bahya* as well as *abhyantara krimi* separately. Acharya Sushruta, Harita, Mahavakara and Bhavamishra have mentioned *Samanya nidana* followed by *vishesha nidana*.

Table 1: Samanya Nidana of Krimi Roga

Ahara	Sushruta Samhita	Harita Samhita	Madhava Nidana	Bhavaprakasha
Grains	-	+	-	-
<i>Godhuma</i> (Wheat)	+	-	-	-
<i>Masha</i> (Black gram)	+	-	-	-
<i>Vidala</i> (Poemogranate)	+	+	+	+
<i>Pishtanna</i> (Grained food)	+	-	-	-
<i>Pruthaka</i> (Flattened rice)	+	-	-	-
<i>Pinyaka</i> (Oil cake)	-	-	+	+
Vegetables				
<i>Shaluka</i> (Lotus root)	+	-	-	-
<i>Bisa</i> (Lotus stem)	+	-	-	-
<i>Kaseruka</i> (<i>Kshudra musta</i>)	+	-	-	-
<i>Parnashaka</i> (Green leafy vegetables)	+	-	-	-
Animal Products				
<i>Ksheera</i> (Milk)	+	+	-	-
<i>Dadhi</i> (Curd)	+	-	-	-
<i>Pishita</i> (Meat)	+	-	+	+
<i>Anupa mamsa</i> (Meat of marshy land)	+	-	+	+
<i>Palala</i> (<i>Tila</i> and other <i>snehayoni dravya kalka</i>)	+	-	-	-
Sugarcane Products				
<i>Guda</i> (Jaggery)	+	+	+	+
<i>Sharkara</i> (Sugar)	+	+	+	+
<i>Sura</i> (Type of <i>sandhana Kalpana</i>)	+	-	-	-
<i>Shukta</i> (Fermented liquid)	+	-	-	-
Diet Habits				
<i>Asatmya bhojana</i> (Consuming uncongenial food)	+	-	-	-
<i>Virudhaashana</i> (Consuming incompatible food)	+	-	+	+
<i>Malinaashana</i> (Consuming unwholesome food)	+	-	-	-
<i>Adhyashana</i> (Eating before previously food is digested)	+	-	-	-
<i>Ajeernabhojana</i> (Food which causes indigestion)	+	+	+	+
Rasa and Guna				
<i>Madhura</i> (Sweet)	+	+	+	+
<i>Amla</i> (Sour)	+	-	+	+
<i>Guru</i> (Heavy)	+	-	-	-
<i>Ruksha</i> (Dry)	-	+	-	-
<i>Pichila</i> (Sticky)	+	+	-	-
<i>Sheeta</i> (Cold in potency)	+	-	-	-
<i>Drava</i> (Liquid)	+	+	+	-
<i>Snigdha</i> (Unctuous)	+	-	+	+
Vihara				
<i>Avyayama</i> (Lack of exercise)	+	-	+	+
<i>Diwaswapna</i> (Sleeping during day time)	+	+	+	+

Mode of Transmission of Gandupada Krimi

- Maladvara Prasarana:** If *makshika* sits over such *mala* it gets infected and inturn infects food items and other substances.
- Vrinadvara Prasaran:** If no proper *shodhana* of *gudapaka* etc *krimi* originates from that *vrina*.

- Ashuchi:** Through hands of infected person.
- Mritdvara Prasarana:** From fertilized soil to raw vegetables.
- Vayudvara Prasarana:** Through dust.
- Jaladvara Prasarana:** Through infected water.

Gandupada Krimi-Samprapti

Due to Agantuja Nidana-Such as Due to Attack by Adrushta Krimi



Gandupada Krimi-Lakshana^[5]

- *Udara shula* (Pricking pain in abdomen)
- *Atopa* (Abdominal distension)
- *Paktinasha* (Weakening of digestive power)
- *Kasa yukta jwara-aniyata or santata* (Fever with cough)
- *Vinbheda* (Loose stool)
- *Vamana*-sometimes along with *krimi* (Vomiting when spreads to *amashaya*)
- *Utklesha* (Nausea when spreads to *amashaya*)
- *Baddhagudodara* due to *antra avarodha* by worm infestation (Intestinal obstruction)

- *Kamala* due to *pittavahini avarodha* (Jaundice)
- *Krucchra shwasa* (Difficulty in breathing)

Ascaris Lumbricoides^[6]

It is a giant intestinal roundworm, causing Ascariasis. They inhabit small intestine of man and cause abdominal pain and digestive disturbances.

Wandering adults may cause serious illness and the migrating larvae produce pulmonary lesions and eosinophilia known as Loeffler's syndrome.

Geographical Distribution

- It is found all over the world i: e., cosmopolitan in distribution

Habitat

- Adults are found in the intestine of man, especially in children

Incidence

- Very high in rural areas with poor sanitation (80% or more)

Mode of Transmission

- Ingestion of food contaminated by hands with soil or by dust containing eggs
- Lack of personal cleanliness and poor nutrition
- Vegetables and water may contain scanty eggs
- Feces when used as fertilizer in gardens may be an important source of infection

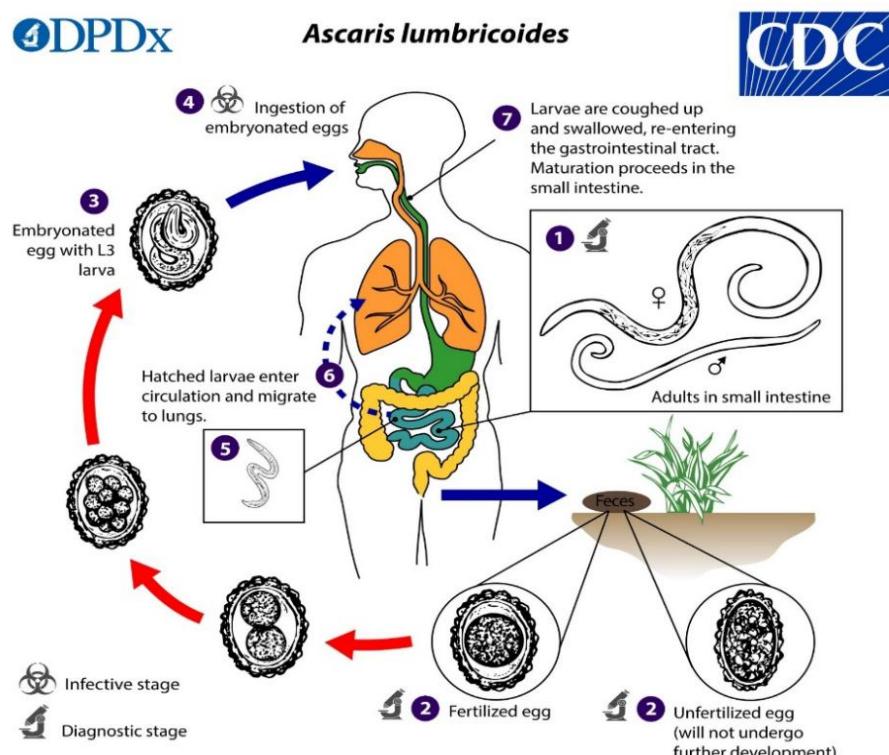


Fig 1: Life Cycle-Ascaris Lumbricoides

Prophylaxis

- Antiparasitic measures
 1. Proper disposal of night soil
 2. Washing of hands, and raw vegetables before eating
 3. Mass treatment of children
 4. Education of children on hygienic measures in schools
- National Deworming Day (NDD)- celebrated on 10th February every year

- It is a day when all children between ages of 1 and 19 can receive treatment for intestinal worms from teachers at all government and government-aided schools and from Anganwadi workers annually
- Treatment given- Tab Albendazole 400 mg 1-0-0 (for children 2 to 19 years) ½-0-0 (For children between age 1 and 2 years)

Ayurvedic Prophylaxis

- **Ajwain (Hyoscyamus Niger):** Ajwain seeds taken with jaggery and dissolved in cold water taken early in the morning help to expel worms out during defecation
- **Karpura (Cinnamomum Camphora):** It is used as a general treatment of intestinal worms
- **Palasha (Butea Monosperma):** the seeds of palasha are taken with buttermilk twice daily for removal of intestinal worms
- **Vidanga (Embelia Ribes):** Its seeds must be powdered and taken in an empty stomach. This is beneficial in expelling intestinal worms

Ayurvedic Preparations for Krimi in Children

- Khadirarishta
- Vidanga arishta
- Kutaja arishta
- Vidanga asava
- Vidangadi churna
- krimikuthararasa

Krimiroga-Sadhyasadyata^[7]

- 13 types of *purishaja krimi* (7). *Ajava, vijava, kipyा, chipya, gandupada, churu, dvimukha* and *kaphaja krimi* (6) *Dhanyankuranibha, Suchimukha, Chipita, Pipilika, Daruna, Darbhapushpa* are visible and are considered as *sadhyा roga*
- Rest of the 7 types of *krimi* are invisible and considered *asadhyा*

Table 2: Upashaya Anupashaya-Krimiroga^[8]

Upashaya	Anupashaya
Surasadi gana dravya	Ksheera
Tikta katu rasa dravya bhojana	Mamsa
Kulathkshara paana	Ghrita
Maricha	Dadhi
Vidanga	Parna shaaka
Nirgundi	Amla, Madhura rasa bhojana
Goksura	Sheeta guna bhojana

Conclusion

- The concept of *krimi* is not new, information regarding *krimi* is found from Vedic period to *Samhita* period
- *Ayurveda* the science of life has elaborately described about the worms as *krimi* which are remarkable among *sankramika ghatakas*
- *Krimi* can be etiological factor for many diseases like *krimija hridroga, krimija shiroroga, Snayuka, Shleepada, Upadamsha, Chardi, krimidanta, krimikarna* etc.
- *Purishaja krimi* are fecal worms originate in intestine and later travel downwards
- Poor socioeconomic conditions, lack of personal hygiene, agricultural factors, lack of awareness and *apathyā ahara vihara* are main causative factors of *purishaja krimi*
- *Gandupada krimi* which can be correlated to *ascaris lumbricoides* has lot of similarities with each other which shows that our acharyas and our science has already described about the *gandupada krimi* which is found in modern science today.

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