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Review Article

ROLE OF UDARA KRIMI W.S.R.TO INTESTINAL HELMINTHS IN THE AETIOPATHOGENESIS OF PANDU.

Vijay Singh Yadav¹, Yogesh², B. K. sevatar³, Preeti gawali⁴

1. Dr. Vijay Singh Yadav MD Rog nidan evam vikriti vigyan , assistant professor Shekhawati Ayurveda medical College pilani Rajasthan
2. Dr. Yogesh PhD scholar Rog nidan evam vikriti vigyan national institute of Ayurveda Jaipur Rajasthan
3. Dr. B. K. sevatar MD PhD associate professor Rog nidan evam vikriti vigyan national institute of Ayurveda Jaipur.
4. Dr. Preeti gawali MD lecturer Rog nidan evam vikriti vigyan national institute of Ayurveda Jaipur.

Address for correspondence:

Dr. Vijay Singh Yadav MD Rog nidan evam vikriti vigyan , assistant professor Shekhawati Ayurveda medical College pilani Rajasthan

Email ID: - drvijays.yadav09@gmail.com

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ABSTRACT

Anaemia is a "democratic" illness in nature. Either from a lower socio-economic or from a higher socio-economic level it may impact someone. The reasons are surprisingly almost the same: malnutrition and an inadequate diet. *Krimi* is recognised since ancient times as an agent producing illness. Our classics do not include the extensive details of the pathology of each *Krimi*, but categorization, morphology, etc. Two large classes - *Bahya* and *Abhyantara* - are categorised as *Krimi* by *Acharya Charaka*. *Abhyantara Krimi* is diagnosed as *Shleshmaja*, *Purishaja* and *Raktaja Krimi*. Our classics contain occasional allusions to the connection between *Krimi* and *Pandu*, which has to be established. According to current research, ancylostomiasis is a recognised cause of anaemia, but research on other parasite diseases is being undertaken.

KEYWORDS: - Udara Krimi, Pandu, Intestinal Helminths

INTRODUCTION

The *Nidanarthkara Roga* is *Ayurveda's* one-of-a-kind conceptual contribution. The current study is an attempt to investigate this. In *Charak Nidana*, there is a description of *Nidanarthkara Roga*. A clinical state in which an existing disease is exacerbated by additional disease-specific etiological variables, resulting in a clinical complexⁱ. The disease that existed before the other disease is still present after it has produced the other sicknessⁱⁱ. This indicates that the illness that originally appeared has grown stronger and can now cause another clinical complicationⁱⁱⁱ.

Anaemia is a disease that is 'democratic' in nature. It may affect anyone, whether they are from a lower socioeconomic level or from a higher socioeconomic class. Surprisingly, the causes are nearly identical: malnutrition and a lack of a well-balanced diet. While the poor cannot afford a healthy diet, the wealthy do not consume a balanced diet that includes an appropriate number of leafy or green vegetables, fruits, cereals, and other food groups due to their passion for 'doodh and ghee' or junk food^{iv}.

ETYMOLOGY

The derivation of the word *Krimi* is available in various lexicons. Popular *Sanskrit* dictionaries *Amarakosa*, *Halayudhakosa* and *Vachaspatyam* state that the word is derived from the root "*Kramu*" which means to step or to walk.^v

Defination

"*Kramati Kramu Pada Viksepe*", means those which move with the help of their feet are termed as *Krimi*. (*Halayudhkosh* - P- 242). But description in the *Samhitas* that *Raktaja Krimis* are footless opposes the aforesaid view. Idea behind this etymology is description of macroscopic creatures which use feet for locomotion.

"*Krimin Kravye Medyati Kramte Va Syat Sarana Karman Kamate va*" means those organism that thrives on raw flesh and perform some movements can be designated as *Krimi* (*Yaskacharya Niruktaam*, 6/3/13).

This definition also possesses limitation, since it does not cover the relative harmless bacteria and helminths which survive on semi digested or digested vegetative food particles.

But some e.g. *Wuchereria bancrofti* thrive on flesh thus acceptable.

The word *Krimi* is spelt in 2 ways: *Krami* which is referred in *Rigveda*, later same is changed into *Krimi* which is used in *Atharvaved*. *Karambelkar V.W.* interpreted meanings of *Krami* as worms and germs that can creep or jump while *Krimi* as insect that can fly. Paniniya Vyakaran states difference in these terms is only of EN pratyaya which is used in sense of movement (En bhrame Samprasaranasch)

“*Kru Hinsane*” means organisms which are harmful and can cause death.

“*Lumpayanti Kidakrimayah Paritah*” which means that one capable to break or injure the surroundings. (Vacaspathyam -3rd part). “*Krimi Kitetyadi Krumaya Kostha Purishadi Baspasambhava*” (Dalhan, Sushruta Samhita - Su.1/30). The living being which born from the vapours of fecal matter in the intestinal tract or in similar environment if created else were. All these etymologies do not seem complete in oneself, where as, number two to five when studied in combination throw light on the concept.

Classification of *krimi* in general :

Classifications under various headings are made by *Acharyas*. *Sushruta* has categorised as *Drishta* and *Adrishta* variety as in Vedic literature. *Charak* states as *Sahaja* and *Vaikarika*. Has a description in details of *Vaikarika* variety. *Charak* and *Sushrut* mentions as twenty while *Harita* stated as thirteen. *Sharangdhara* mentioned as twenty two. While rest of workers, like *Vagbhata*, *Madhavkara* and *Bhavmishra* followed *Charak*. *Charak* and *Harita* further on the basis of site of location made divisions like *Bahya* and *Abhyantar*.

Here is illustration of same:

The numerology used is same by *Charak* and *Sushruta* but names are different. Total number goes to 37 if only names are counted. On the contrary *Harit* mentions 13 varieties which include 7 external and reduction is seen in number of internal variety to 6. Further *Sharangdhara* opines total number as twenty but states further that there are many others as for e.g. *Snayuka* and *Vrana Krimi* totalling to 22. *Chakrapanidutta* while commenting on *Charak Samhita* also expressed his views on numerology stating that as twenty is a plural noun thus number of *krimi* is more than twenty^{vi}.

I. According to the site of location classified into two as: *Bahya* (external), *Abhyantar* (internal)

This pattern is particularly followed by *Charak* and *Harita*, whereas *Sushruta* does not seem to mention the same, but as only stated internal Krimi. *Harita* describes 7 varieties of external Krimi as- Sweta, Krishna, Charmayukika, Binduki, Vartula, Matkuna and Yastika.

II. According to the *Yoni Charak*, *Vagbhat*, *Madhava*, *Bhavamishra Acharyas* categorise *Abhyantar Krimi* as: *Shleshmaja*, *Purishaja*, *Raktaja*, *Harita* has followed a unique type of division wherein only number of internal *krimi* is mentioned and no further classification is made.

III. Classification found in Vedic literature can also be included as *Drishta*(visible),*Adrishta*(invisible)

This classification is also seen in *Samhita* wherein *Sushruta* mentions 13 varieties of *Drishta Krimi* under headings of *Shleshmaja* (6) and *Purishaja* (7). Present study deals with *Udar Krimis*. Hence nomenclature of the same by various *acharyas* is mentioned in details. The word *Udara Krimi* is nowhere used in the texts but previous workers like *Bajoria K.R.*(1980) working on the subject assigned this after considering symptamatology which showed mixed features of *Shleshmaja* and *Purishaja* variety with respect to modern recognised parasites^{vii}.

Madhavkar, *Sharangdhar* and *Bhavmishra* followed *Charak* in this regard. On the contrary *Harita* come up with completely different names under heading of *Purishaja* variety.

Analysing the names described by various *Acharyas* we can summarise they denote various aspects of *Krimis*^{viii}. Can be understood under 5 broad headings.

Names according to morphology and colour

Mahaguda, *Darbhakusuma*, *Mahapushpa*, *Praloon*, *Chipita*, *Pipillika*,

Makeruka, *Chipya*, *Gandupada*, *Dwimukha*, *Pruthumunda*, *Dhanyankuranibha*,

Suchimukha, *Kinchuk sannibha*, *Anawah* and *Sukshma*.

Names according to movements

Ajawa and *Vijawa*

Names according to Pathological status

Antrada, *Udarada*(*Udarveshta*), *Hridayada*, *Darun*, *Sashula* and *Leliha*

Names having no etymological meaning

Churu, Saugandha, Kakeruka, Sausurada and Kipyra

This nomenclature raises difference of opinions and controversies as no

samhitakars has neither mentioned basis of such naming system nor further described

Symptomatology and treatment accordingly.^{ix}

Our classics include sporadic references to *Krimi* and *Pandu's* relationship, which must be established.

Ancylostomiasis is a well-known cause of anaemia according to current research, although investigations are

also done in connection to other parasite infections^x. A recent study of 50 urban and rural Egyptians from

Cairo with *A. duodenale*, *A. lumbricoides*, *E. vermicularis*, *H. nana*, *S. mansoni*, and *T. saginata* found

Anaemia of various degrees in all instances^{xi}. Ancylostomiasis patients had the lowest Hb percent and

hematocrit value. When compared to other parasitic illnesses, the blood films of the same individuals revealed

significant hypochromia. Ancylostomiasis had the greatest rate of eosinophilia (29 percent), followed by *S.*

mansoni (14 percent)^{xii}.

CONCLUSION

Intestinal Helminths were a significant source of health and nutritional illnesses in school children, in

particular. It is a hidden pandemic that now in many poor nations affects the health, well-being and learning

capacity of millions of children. In fact, recurrence of helminthic infections is still frequent after widespread

management with contemporary anthelmintic medicines under eradication programmes. The links between

Krimi and *Pandu* that must be established are sometimes alluded in our classics. Current study shows that

ancylostomiasis is a known cause of anaemia, although research is under way into additional parasite illnesses.

The lowest Hb percent and hematocrit value were seen in patients with ancylostomiasis. The blood films of

those patients showed considerable hypochromy in comparison with other parasite diseases. The highest

incidence of eosinophilia was ancylostomiasis

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