

“ROLE OF *HARIDRA (CURCUMA LONGA)* IN THE MANAGEMENT OF DYSLIPIDEMIA”

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ABSTRACT

Disorders of lipoprotein metabolism are collectively referred as Dyslipidemia. The prevalence of Dyslipidemia in India is 25-30% of urban population and 15-20% in rural population. It affects both the genders but it is more common in males. 30-40 years of age group has a tendency to high prevalence. Because of the present lifestyle Dyslipidemia has become a burning problem not only in India but worldwide. Dyslipidemia can be correlated to *Medodustijanyavikaras* in Ayurveda. *Nidanas* like *atimadhura*, *atisiddha*, *guru ahara*, *avyama*, *avyavaya*, *diwaswapna* leads to *Medodusti*. It is a *Santarpanajanyavikara* which should be treated by *Apatarpan*. *Ruksan*, *lekhan*, *usnagunas* causes *Apatarpan*. *Haridra* (*Curcuma longa*) has been described as *kustaghna*, *krimighna*, *lekhana*,

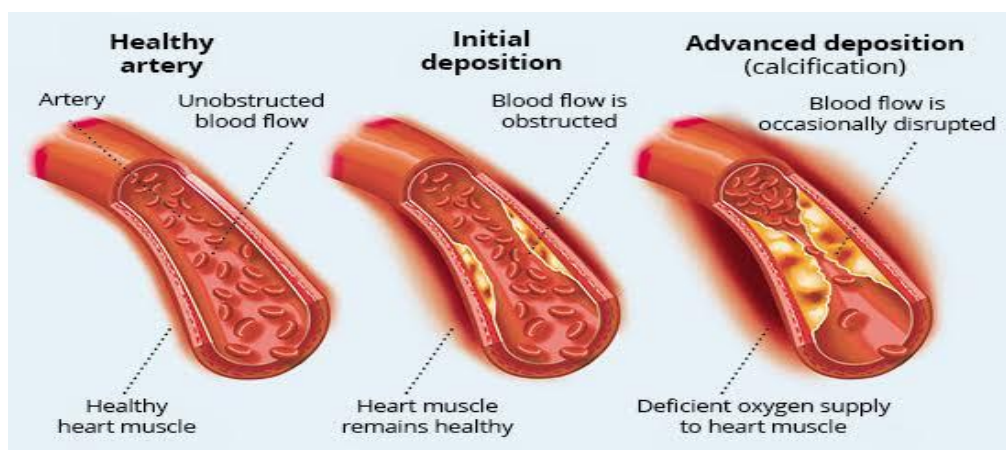
kaphanasana, *varnya* etc by our Acharyas. The *laghu*, *ruksaguna*, *katu vipaka* and *usnavirya* of *Haridra* stands out to be very potential as *medohara* and *lekhana*. Therefore this article reviews management of Dyslipidemia (*Medodustijanya Vikara*) using *Haridra* (*Curcuma longa*).

KEYWORDS: *Haridra*, Dyslipidemia, *Medodushti*, *Santarpana*, *Apatarpan*, *Curcumin*.

INTRODUCTION

Lipoproteins are a group of soluble proteins that transport fat and other lipids in blood plasma. Disorders of this lipoprotein metabolism gives rise to Dyslipidemia which includes deficiency or overproduction of lipoproteins or in some cases both. It is a key contributor for the increase rate of morbidity and mortality in present era. This is a primary risk factor for ATHEROSCLEROSIS, CORONARY ARTERY DISEASE and peripheral vascular disease.

Dyslipidemia is characterized by higher levels of cholesterol, higher levels of triglycerides, low high density lipoprotein (HDL) and increased very low density lipoprotein (VLDL). Dyslipidemia with obesity increases the risk of cardiovascular diseases. Excessive accumulation of *medas* in various parts of the body is termed as *Medoroga* in Ayurveda. A person with pendulous movement of buttocks, abdomen, breasts, *shramaswasa*, *swedabaddha* has been characterized as *Atishtula*.^[1] *Medasis Prithvi* and *ApMahabhuta* predominant which is similar to *kaphadosa*. Consumption of *snigdha* (unctuous), *amlaras* (sour), *sita* (cold), *madhura* (sweet), *Kapahavardhakaaharas* with lack of exercise (*avyayama*), day sleep (*divaswapna*), *achintya* causes over nourishment of *medodhatu* but other *dhatu*s are deprived of nourishment.^[1] The increase of *medodhatu* leads to accumulation of *medas* in various parts of the body. As described in Charak Samhita^[1] the consequences are *Ayuhrasa* (decreased life span) *Javoporodha* (decrease enthusiasm), *Dourgandhya* (bad odour), *Kricchavyavayata* (loss of libido) *Swedabadha* (excess perspiration), *Kshutpipasadhikya* (increase hunger and thirst).^[1] *Medodushti* also gives rise to *PramehaRoga*. Obesity and Dyslipidemia needs serious attention today. *Haridra* (*Curcuma longa*) on the other hand is an indispensable part of Indian cuisine since ages. The properties of *haridra* have been described extensively in Vedas and Samhitas. This article is an attempt to review the properties of *HARIDRA* and its role in managing DYSLIPIDEMIA (*Medoroga*).



Haridra(*curcuma longa*)^[21]

Kingdom	Plantae
Division	Mangoliophyta
Class	Liliopsida
Order	Zingiberales
Family	Zingiberaceae
Genus	Curcuma
Species	Longa linn



Rasa panchaka^[13]

<i>Rasa</i>	<i>Tikta, Katu</i>
<i>Guna</i>	<i>Laghu , Ruksa</i>
<i>Virya</i>	<i>Usna</i>
<i>Vipaka</i>	<i>Katu</i>
<i>Karma</i>	<i>Kaphavatanasan, VranashodhanPittarechak, Visaghna, Varnya, Kusthaghna, Krimihara, Pramehanasana, Sothara, Lekhan, Swasahara, Hikkani-grahan</i>

Properties of *Haridra* according to various *Nighantus*.

Sl No	<i>Nighantu</i>	<i>Properties</i>
1	<i>Dhanvantari Nighantu</i> ^[5]	<i>Vishaghna, Kushthaghna, Kandughna, Pramehahar, Vrana, Varnya, Balya, Krimighna, Pinasahar, Aruchihar</i>
2	<i>Bhavaprakash Nighantu</i> ^[6]	<i>Kaphanashan, Pittanashan, Varnya, Twakdosahar, Pramehanashan, Raktadoshanashak, Shothahar, Panduhar, Vranaropan</i>
3	<i>Madanpala Nighantu</i> ^[9]	<i>Kaphanashan, Pittanashan, Varnya, Twakdosahar, Pramehanashan, Raktadoshanashak, Shothahar, Panduhar, Vranaropan</i>
4	<i>Raj Nighantu</i> ^[8]	<i>Kaphanashan, Vatanasna, Varnya, Twakdosahar, Pramehanashan, Raktadoshanashak, Vranaropan, Kushthaghna, Kandughna, Pramehahar,</i>
5	<i>Kaiyadev Nighantu</i> ^[7]	<i>Varnya, Kaphanashan, Pittanashan, Panduhara, Apachihara, Twakdoshanasanam, Visahar, Sothahara</i>

GANAS of *Haridra*

- According to Charak samhita^[1] – *kustaghna ,lekhaniya , vishaghna, sirovirechan and tiktaskanda*
- According to Susrutasamhita^[2]– *Haridradi, Mustadi, Lakhsadi, Vallipanchamul, Vatshamsan and Kaphashamsan.*

- According to Ashtanga Hridaya^[3]-*Haridradi and Mustadi*
- According to Ashtanga Sangraha^[4]- *Haridradi*

Previous Studies on Haridra

Studies shows that it helps in lowering the elevated levels of triglycerides and lipids. Haridra when feeded to rats shows elevation in the activity of hepatic cholesterol-7 alpha-hydroxylase which is rate limiting enzyme of bile acid synthesis. This study suggests that Haridra can stimulate the conversion of cholesterol to bile acids, an important way to eliminate cholesterol from the body.^[21] In another study it shows that serum triglycerides were significantly decreased following curcumin supplement.^[27] Another shows that curcumin protects against the oxidation of cholesterol and lowers the triglycerides level and slightly increases the HDL-C levels.^[28] A study also shows that Curcumin is presumably most effective in lowering Triglycerides.^[29]

DISCUSSION

Dyslipidemia (*Medoroga*) is caused due to *santarpanjanyanidanasevana* like *avyayama*, *achintya*, *atimadhura*, *atisnigdha*, *divaswapna*, *avyavaya*, *adhyasana*, *atimatraaharasevana*. Apart from this *Medodusti* also occurs due to *beejaswabhaba*. *Jatharagni* is responsible for nourishment of the *dhatu*s, but due to decrease in *jatharagni* there is formation of *ama*(undigested food) which causes *srotoavarodh* (obstruction of channels) which in turn increases *medodusti* and causes *Medoroga*. The qualities like *sita*, *guru*, *snigdha*, *madhura*, *picchilagunas* attributes to *Medoroga* so the qualities which are opposite should be used for treating it. Drugs which possesses the qualities like *Laghu*, *Usna*, *Teekshana*, *vishada*, *ruksha*, *Khara* significantly subdue *Kapha* and *Medodushti*. *Katu*, *Kashayatikta rasa* reduces vitiation of *kapha* and *medodushti* also neutralizes the *Aam*. All the qualities required for managing *Medodushti* is found in *Haridra* so *Haridra* is a very potential drug in Dyslipidemia.

CONCLUSION

Haridra is a well-known and well established drug used since ages. It is used in many medicinal preparations for treating numerous diseases. The *guna - karmas* of *Haridra* mentioned in our classics, *Ganas* that includes *Haridra* and also by evaluating the various studies carried out on *Haridra* or its extract it is very much convincing that *Haridra* can be useful in the management of Dyslipidemia.

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