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CONCEPTUAL REVIEW OF NAGA DHATU

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ABSTRACT

Ayurveda system of medicine uses plant, metals and minerals as drug of source. Rasa, Uparasa, Dhatu, Upadhatu, Visha Dravyas are different categories of drugs. Naga is a metal which is explained in our classics under the Dhatuvarga. Naga is Tikta, Madhura in Rasa, Atyushna in Veerya, Snigdha, Deepana, Rasayana in Guna and Lekhana, Medohara, Pramehaghna, etc. in Karma. It has the capacity to cure many diseases. It is mainly indicated in Prameha and Prameha janita vikaras and it is said to be Rasayana also. Naga is represented by the lead in modern science. Lead is considered as one of the metallic inorganic irritant poisons. It comes under the category of heavy metals. Ayurveda has references of usage of this dhatu after shodhana, marana procedures. This article is explaining in detail about Naga dhatu shodhana, marana, qualities and benefits from different Ayurveda texts.

KEYWORDS: Dhatu, Shodhana, Marana, Naga, Lead.

INTRODUCTION

Naga is a metal which is explained in our classics under the Dhatuvarga. The Dhatus consists of inorganic elements which are available in nature in various forms and in combination with other elements which are not suitable for consumption by human beings. Later in our science the modification and development took place for the purpose of making these elements easily acceptable by the body and to provide maximum therapeutic benefits. This can be achieved through standard classical procedures like Shodana and Marana. Naga represents "Budha Graha". When we go through any book of astrology we find the reference of each and every planet having its effect on humans and which can be controlled by wearing particular metal or precious stones related to that planet. Naga is said to be the Shukra of Vasuki sarpa so it can be treated in the conditions of shukra dhatu vikara.

DRUG REVIEW

Naga is a metal which is explained in classical literature under the Dhatu varga. The Sanskrit word "Dhatu" is derived from the root "DHA" meaning "to support". [1] In other context the word Dhatu denotes a "metal".

The term Loha is composed of the root "Luh" meaning Karshane means the materials which are obtained by the extraction method from ores /minerals are known as Lohas². Naga is one among Putilohas of Dhatuvarga. [2]

The word Pooti Loha indicates the bad smell which is perceived while heating.

Mythological Origin

Different views are available about the mythological origin of Naga.

Naga is said to have its origin from the shukra of VasukiSarpa which was ejaculated when he saw the daughter of Sarparaja Bhogi. [3] Naga was obtained from Indra. [4]

Historical Review Vedic period (2000–1500 B.C)

In Veda kaala Naga was used mainly in the krimihara chikitsa. In Rigveda we don't find any description about Naga. In Yajurveda and Atharvaveda Seesa is enumerated along with other Dhatus and is said to be Krimighna. In ShathapathaBramhana it is said that Indra had killed a Raakshasa with Seesa. ^[5,6]

Samhita period

CharakaSamhita(1200 B.C)

In Charaka chikitsa sthana while explaining Mandala kushta chikitsa Naga ismentioned for external application in the form of choorna. [7]

Naga bhasma is found mentioned as an ingredient in Muktadya Churna in the treatment of Hikka Shwasa. [8]

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Sushruta samhita(1000 B.C)

Acharya Sushruta categorizes the Naga under Trapvadi gana and mentioned its utility as Garakrimihara and also it is said that it relieves pipaasa, visha, hrudroga, paandu, Meha rogas.^[9, 10]

AsthangaSangraha (3rd-4th century)

Acharya Vagbhata described that Naga is having the same qualities of Trapu and also said it is Pandutva Krimi Vaata hara.[11]

While describing the treatment for Netrarogas, the Anjana prepared out of powder of Seesa along with other drugs is mentioned.[12]

AsthangaHrudaya (3rd-4th century)

While describing treatment for Netrarogas use of Naga by the name Bhujaga is mentioned along with Parada. [13]

KoutilyaArthashastra (4th century)

In this book we get the reference about the description of the place where Naga is available such as the area which has colour similar to that of Crow, Pigeon or Gorochana with white lines and putrid smell. [14]

Tantric period

RasendraMangala(7th-8th century)

Shodana of Naga is described and the procedure of making Naga stable on fire by treating it in Dolayantra through the medium of shubra jala. [15]

Rasarnava(10th century)

Table no. 1: Samanya Shodhana.

| Drug and Media In sequence | Method | Repetition | Reference |
|---|---------------------|-------------------------|---|
| Taila–Takra - Gomutra–Aranala - Kulathakwatha | Nirvapa/ Daalana | 7 times in each liquid | RRS ^[20] , RD ^[21] |
| Taila–Takra - Kanji–Gomutra - Kulathakwatha | Nirvapa | 3 times in each liquid. | SS ^[22] |
| Kanji - Takra - Kulatha kwatha - Gomutra - Tila taila | Nirvapa | 3 times in each liquid. | RT ^[23] |
| Taila - Takra Gomutra–Kanji - Kulathakwatha | Nirvapa | 7 times in each liquid | BRS ^[24] |
| Kadalikanda Swarasa | Nirvapa | 7 times | $AP^{[25]}$ |

Vishesha Shodhana

It is used as a specific procedure for a particular drug material individually, not for a group. For Vishesha Shodhana same procedure i.e heating and quenching is applied but the liquid medias are different. Various methods of Vishesha Shodhana of Naga were mentioned by different Acharyas, which are tabulated as below.

Reference regarding Naga being used in Dhatuvada is seen.[16]

RasahridayaTantra (10th century)

Naga is categorised under Pootiloha and its description is seen.[17]

Rasendra Chudamani(12th – 13thcentury)

It contains detailed description about properties, Shodana and Marana of Naga.[18]

Rasa prakasha Sudhakara (12th– 13thcentury)

It contains detailed description about properties, Shodana and Marana of Naga.[19]

Naga Shodhana

Shodhana is a process carried out to remove impurities present in the dravya. It is the preliminary and most important procedure to nullify the toxins from the metals, potentiate them to achieve therapeutic excellence and to make them easily digestible, absorbable in the body. In context of metals this process is grossly subdivided into two major categories.

- 1. Samanya Shodhana
- 2. Vishesha Shodhana

Samanya Shodhana of Naga is the general method of Shodhana for the Lohavarga.

The methods are listed below.

Table 2: Vishesha Shodana of Naga Dhatu.

| Drug and Media | Method | Repitation | Reference |
|---|------------|------------|---------------------|
| Nirgundimula swarasa | Nirvapa | 7 times | RT ^[26] |
| Churnodaka | Nirvapa | 7 times | $RT^{[27]}$ |
| Ravidugdha | Nisechana | 7 times | $AP^{[28]}$ |
| Gauriphala, Rajani, Ksuraka, Kuberabija, Tumburu, Mallika kshara, Palashakshara, Mayurajakshara, latex of Kulisha | Parivapa | 7 times | REM ^[29] |
| Sinduvarapatraswarasa + Haridrachurna | Nikshepana | 3 times | $RC^{[30]}$ |
| Ravidugdha | Nisechana | 3 times | RM ^[31] |
| Nirgundiswarasa + Haridrachurna | Parivapa | 7 times | RPS ^[32] |
| Arkadugdha+ Nirgundi mulachurna | Nisechana | 7 times | $AK^{[33]}$ |
| Haridra, Tumburubija, Kokilaksha, Jatipatra, Mokshaka, Apamarga, Brahma, Gouriphala + Snuhikshira | Nisechana | 7 times | AK ^[34] |
| Mahishaasthichurna+ Mahisha mutra | Nisechana | 7 times | $AK^{[35]}$ |
| Sinduvarajatachurna, Renukachurna, Haridrachurna + Nirgundi patraswarasa | Nisechana | 3 times | RRS ^[36] |
| Nirgundimulachurna, Arkadugdha + Nirgundi patraswarasa | Nisechana | 7 times | RJN ^[37] |
| Haridra, Tumburubija, Kokilaksha, Kutharika, Gouripala, Amalaki, Chandi, Kshudrabrahmi, Jeeraka + Snuhikshira | Svedana | 7 times | RJN ^[38] |
| Nirgundipatraswarasa | Nisechana | 7 times | RJN ^[39] |
| Sinduvarajata, Varahikanda, Haridra + Nirgundi swarasa | Nisechana | 3 times | RJN ^[40] |
| Arkadugdha | Nisechana | 3 times | RJN ^[41] |
| Triphalakshaya, Kumara swarsa, Hastimutra | Nisechana | 7 times | RJN ^[42] |

Table 3: Naga Marana.

| Sl. No | Drug and Media for Bhavana | Procedure | Repetition/ Duration | Reference |
|-----------|---|----------------------------|-------------------------|---------------------|
| 1 | Naga patra + lepana of shuddha Manashila triturated with vasa swarasa. | Lepana, Varahaputa. | 3 times | RPS ^[43] |
| 2 | Molten Naga + Palasha mula churna | Paaka | 3 hours | RPS ^[44] |
| 3 | Molten Naga + Ashwatha twakchurna. Naga powder + equal quantity of Manashila + Nimbu swarasa. | Mardana, Bhavana, Puta. | 3 times | RT ^[45] |
| 4 | Molten Naga + Manashila triturated. Powder Naga + Gandhaka + Amladravya. | Mardana, Bhavana, Puta. | 3 times | RT ^[46] |

Table no. 4: Properties of Naga Bhasma.

| Table no. 4. I Toperties of Naga Bhasha. | | | | | | | |
|--|---------------------|--|---------------------|---------------------------|--------------------|---------------|----------------------------------|
| Properties | RRS ^[47] | $\mathbf{AP}^{[48]}$ | RSC ^[49] | RT ^[50] | RM ^[51] | $AK^{[52]}$ | $RJN^{[53]}$ |
| Rasa | Tikta | • | Tikta | Madhura, tikta | - | Tikta | Tikta, madhura |
| Guna | Snigdha | • | Snigdha | Guru, snihdha, sara | - | Snigdha | Snigdha |
| Veerya | Ushna | Ushna | Ushna | Ushna | - | Ushna | Ushna |
| Doshagna-ta | Vatakaphahara | Tridosha-hara | Vataka- phahara | - | Tridosha- hara | Vatakaphahara | Vatakaphahara |
| Karma | Dipana | Rechaka, dipana, viryavardhaka, grahi. | Dipana | Lekhana, vanhivardhana | Grahi, vishagna | Dipana | Dipana, medhya, viryavardhaka |

Medicinal usage of Naga bhasma

Usage of Naga bhasma as treatment for many diseases are mentioned in many Ayurvedic texts like Rasaratna samucchaya, rasatarangini.

Nagabhasma can be used in prameha, vrana, grahani, gulma, vataroga, kapha roga and asrugdara. [54]

DISCUSSION

Naga is Tikta, Madhura in Rasa, Atyushna in Veerya, Snigdha, Deepana, Rasayana in Guna and Lekhana, Medohara, Pramehaghna, etc. in Karma. It has the capacity to cure many diseases but it is mainly indicated in prameha and Prameha janita vikaras and it is said to be Rasayana also.

Naga is represented by the lead in modern science. 0.0013% of earth's crust is made up of this metal. Nowa-days, it is used in paints, lead-acid batteries, pesticides, typesetting, etc. Toxicity of lead occurs mostly through industrial and environmental exposure. It affects almost all systems in the body.

As per modern chemistry lead is considered as one of the metallic inorganic irritant poisons. It comes under the

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category of heavy metals. If a heavy metal comes in contact with body tissues for longer duration then there may be chances of producing toxic effect in the body. These toxins may act at the level of genes also. So Naga should be used only after proper purification for internal use.

CONCLUSION

Therapeutic use was started after the development of Rasa Shastra. Use of metals and minerals for the medicinal purpose was prevalent even in prehistoric period but to a very limited extent. It is also clear from the literature, that in earlier times, these drugs were used either in the form of fine powder or as paste after rubbing. Even though it has toxic effects, after shodhana and marana it is a very good drug of choice many diseases. Drug used in proper dosage can give good results.

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