ROLE OF PARASURGICAL PROCEDURES IN THE MANAGEMENT OF SARPA VISHA

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ABSTRACT

Agadatantra is one of the eight branches of Ayurveda. It is a branch in which treatment of various Sthavara (~plant origin) and Jangama (~animal origin) Visha (~poisons) are described with signs and symptoms. A general principle for the treatment of poisoning is explained in Ayurvedic Samhitas like Charaka, Sushruta, and Vagbhata. Snakebite is one among Jangama Visha (~animal origin poison), its mortality in India is approximately 1300 annually. The snakebite management protocol is elaborately prescribed by the World Health Organization (WHO). Acharya Charaka has explained Chaturvimshati Upakrama (~24 treatment procedures) for the management of all types of poison including snake bite. Agnikarma (~Cauterization), and Raktamokshana (~Blood letting), are the only two Para surgical procedures among 24 treatment modalities. Para surgical procedures help to get rid off localized poison immediately thus preventing the spread and further complications. This article is an extensive review mainly focussed on the role of Para surgical procedures in the management of Sarpa Visha (~Snakebite poison).

KEYWORDS: Agnikarma, Ayurveda, Chaturvimshati upakrama, Parasurgical procedures, Raktamokshana, Snakebite management.

INTRODUCTION

AgadaTantra is one of the eight branches of Ayurveda. Which deals with various types of poisons, their signs, and symptoms, diagnosis, and management. Acharya Vaghbata explained general Sarpa Visha Chikitsa based on Dosha (Biocenter), Sthana (Site), Prakriti (Nature), Vega (Stage).

- In Durvikarasarpa Damshaa (~Bite of hooded snakes)-Pana (Drink) of Sindhuvaarita Moola (Vitex negundo Linn), or Girikarnika (Clitoria ternatea Linn).
- In Mandala Sarpa Visha (~Bite of Snakes with patches) – Equal quantity of Sugandha (Santalumalbum), Mrdvika (Vitis vinifera), Gajadantika with half quantity of Sourasa Patra, Kapittha (Feronialimonia Linn), Bilva (Aeglemarmelos), Dadima (Punic agranatan Linn), Kshoudra (Honey).
- In Rajimantha Sarpa Visha (~Bite of Snakes with Stripes)-Katuka (Picrorhiza kurroa), Kushta (Saussurea lappa), Vyusa (Zingiber officinale), Piper nigrum, Piper longum), Tagara (Valeriana wallchii DC) made into paste and
consumed mixed with honey, destroys the poison of snakes with stripes.

- **Agni Karma**
  - Mani Prayoga-Dharana of Marakata (Emerald), Vaidooorya (Cat’s eye), Vajra (Diamond), Himavat (Acorussgram eneuss Soland), Drona (Leucas aspera), Punarnava (Boerhavia Difusa), Mahadrona (Leucas cephalotes), Maanasi
  - Agada Prayoga – Himavatagada, Bilwadigada, Sarvakarmika agada, Vajradiagada, Mritisanjivinigulika, A shtangaagada

Acharya Charaka has explained Chaturvimshati Upakrama (~24 treatment procedure) as the general line of management for all types of Visha, they include, *Mantra (~Chanting hymns), Arishtha bandana (~Tinctur application), Uthkarthana (~Incision), Nishpeedana (~Squeezing), Chushanat (~sucking), Agni (~Cauterization), Parishek (~Fuming), Agyaha (~Immersion bath), Rakhamoshana (~Bloodletting), Vamana (~Nasal instillation), Virechan (~Purgation), Upadhana (~Applying the medicine over incised scalp), Hṛdayavaran (~protection of hridya), Anjanat (~Collaryum), Nasya (~Nasal instillation), Dhoop (~Fuming), Leha (~Infectus), Aushhad (~medicine), Prashamana (~pacifying measure), Prathisaran (~rubbing), Prathivisha (~antidote), Sanjastapan (~regaining consciousness), Lepa (~ointments), Mrthisanjivini (~revival).* Among these, Agnikarma (~CAuterization), and Raktamokshanat (~Bloodletting), are the only parasurgical procedures.

AGNIKARMA

The word Agni Karma is made up of the combination of two words – Agni and Karma (i.e. fire and procedure). In short, we can say it is a procedure done by Agni (~fire) for treating a disease.

Acharya Charaka explained Agni Karma in the context of Visha which is located in Twak (~skin) and Mamsat (~muscle). It is carried out in all the Visha (~poison) conditions except in the case of the predominance of Pitta. As this procedure aggravates Pitta Dosha, it is contraindicated in Mandali Saras Visha and Rakta Dhatugata Visha. Blood is the important media through which the poison spreads. It blows up the poison in the body just as hot air blows up the fire. The site of the bite is cauterized with the help of heated rods of gold, iron, etc. In certain cases; it is carried by a burning faggot. Fire converts anything into ash within seconds and poison is no exception to this. Hence this cauterization is indicated in cases of poisoning.

Acharya Sushruta mentioned the Agnikarma (~cauterization) as supreme in all the parasurgical procedures. A separate chapter is dedicated to Agni karma in *Sutra Sthana*, where every aspect of cauterization is being explained, which denotes its importance in the treatment during those periods. Sushruta has referred Agni karma (~cauterization) in Agropaharaniya, as *Upayantra* and *Anushtra*. Acharya Sushruta has specified the materials which are to be used for Agni Karma for different site of application:

1. Twakdagantha (~Pippali (Piper longum)), Ajashakrit (~Feces of the goat), Godanta (~Teeth of the cow), Shara (~Arrow), Shalaka (~Probes).

Vaghbatahas also explained the same procedure of Agnikarma which is explained by Charaka and Sushruta. In *Ashtanga Samgraha*, a detailed description of Agni Karma (~cauterization) is found in the 40th chapter of *Sutra Sthana*. In *Ashtanga Hridaya*, a detailed description of Agni Karma (~cauterization) is described in the 30th chapter of *Sutra Sthana*.

RAKTAMOKSHANA

The word Raktamokshana is made up of the combination of two words, i.e. Rakta which means blood, and Moksha which means to leave. Raktamokshana means to let out blood. Raktamokshana treatment is very effective to neutralise toxin.

According to Charaka, it is conducted by scraping application of Shringa (~Cow’s horn) – Vata Vikara, Jalouka (~Leech therapy) – Pitta Vikara, Alaab (Pitcher gourd) – Kapha Vikara or Ghatika (~Medium sized glass jar with one open end) – Vata Vikara. If the blood does not ooze out easily, then the area must be rubbed gently but briskly to facilitate the free flow of blood. This process of rubbing is known as ‘Pragharchana (~Rubbing)’. It is carried out with the powder of Trikatu (Zingiber officinale, Piper nigrum, *Piper longum*), *Rajini* (Curcuma longa), Panchalavana (Five varieties of salts), Gorochana, Vartaka

According to Sushruta, Raktamokshana (~Bloodletting) is usually carried out in the veins around the bite site, if the poison has spread to the distant areas, the veins in the forehead or the extremities should be punctured. Raktamokshana (~Bloodletting) should not be attempted in children, old aged people, and pregnant women. Hence the process of bloodletting is one of the important procedures to control the intensity of the poison in case of poisoning.

It should be quickly resorted to in the cases where the site of the bite is discolored, rigid, swollen, painful.
Vaghbata also explained the same procedure as mentioned in Charaka and Sushruta and also explained, vitiated blood more than one Prashta (134 pala=768 grams) should not allowed to flow out, even in strong person, if excess blood is let out and pure blood starts flowing. It should be arrested immediately. Otherwise, it leads to complications like fainting, cardiac complications, etc., Hence the physician should make every attempt to arrest the flow of the pure blood through intense cold procedures like Pariseka (~Sprinkling), Lepa (Ointment), etc., as these measures initiate the process of blood clotting and this prevents the loss of pure blood.\textsuperscript{10} Vitiated blood spreading and circulating in the body surely causes death.\textsuperscript{11} Hence it should be removed as quickly as possible. It is highly beneficial in conditions where the poison has spread to distant parts of the body.

MATERIALS AND METHODS
The study being a literary review, the sources of data are collected from Brihatriyis (Charakasamhita, SushruthaSamhita, Ashtha ngaSangraha/Hridaya), contemporery text books, relevant journals, and websites.

DISCUSSION
Superiority of Agnikarma
Agni Karma (~cauterization) is superior to Bheshaja (~Medicine), Shashtra (~Instruments) & Kshara karma (~Caustic therapy) as a disease burnt with Agni will never reoccur. Vishha (~Poison) which cannot be cured with any other Upakramam (~Treatments), can be cured with Agni Karma (~cauterization).\textsuperscript{18} AgniKarma (~cauterization) is a pain management procedure described in Ayurveda. From the ancient period, this procedure was performed in a different place with a different name. Nowadays modern science used cautery like instruments which are nothing but modified AgniKarma (~cauterization) only. This is a superior treatment to all other procedures. After AgniKarma (~cauterization) there is no chance of reoccurrence of Vishha (~Poison).

Superiority of Raktamokshana
On the critical study of Charakasamhita, it is recognized that the author has incorporated various aspects of Raktamokshana (~bloodletting therapy) as under.
\begin{itemize}
\item Types of Raktamokshana (~Bloodletting): Sringa (~Cow’s horn) Jalouka (~Leech therapy), Alaabu (~Pitcher gourd), Ghatica (~Medium sized glass jar with one open end).
\item Method of application
\item Places of Venesection to be done
\end{itemize}

Though CharakaSamhita is considered to primarily work on Kayachikitsa (General medicine), the matter related to other branches has also been dealt with comprehensively. However, the author is very much clear about the views and ideas while dealing with a patient other than his specialization. Hence, AcharyaCharaka has never crossed his jurisdiction at any point of time, while documenting the medical knowledge in his compendium. This is one attempt to describe all detailed information of Parasurgical procedures in snake bite poison in this article.

CONCLUSION
ChaturvimshathiUpakramas (~24 treatment procedures) are the first line of management in Sarpa (~Snake) and all types of Visha (~Poison), among those Agni Karma (~cauterization) and Raktamokshana (~bloodletting) are the Para surgical procedures mentioned in it, which helps to remove the localized poison by which it avoids systemic absorption of poison and prevents the further complication of poison, hence this Agni karma (~cauterization) and Raktamokshana (~bloodletting) place a vital role in the primary management of the SarpaVishat (~Snake bite poison).

REFERENCE
\begin{enumerate}
\item GautamBiswas, Review of Forensic medicine and toxicology, health science publisher New Delhi 3rd edition P-465.
\item Paradakara HSS, AstungaHridaya, uttarsthana, 36/18, ChaukhanbhaSurabhartiPrakashan, Reprint :2010, P-890.
\item Acharya YT CharakaSamhitha with Ayurveda Deepika Commentary of Chakrapanidatta, Reprint ed: Varanasi: Chaukamba Orientalia, 2015; Chikitsasthana, chapter 23;P-572.
\item Acharya YT CharakaSamhitha with Ayurveda Deepika Commentary of Chakrapanidatta, Reprinted: Varanasi: Chaukamba Orientalia, 2015; Chikitsasthana, chapter 23;P-574.
\item P.V.N.R. Prasad, IllustratedAgadatantra, Chaukhamba Sanskrit series office, Varanasi, Chapter 6;2019;P-91.
\item Sharma A R, edited with ‘susrutavimarsini’ Hindi commentary. (1stEd.), Susrutasmhita, maharshisrsruta.


17. Paradakara HSS ,AstaghaHridaya, uttarsthana, 36/18, ChaukhambaSurabharti Prakashan,Reprint:2010,P-901.