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### **Review Article**

### Anushastra-Agnikarma and Raktamokshana as Pain Management Modality -The Concept of Acharya Sushruta

Dr. Shubhangi P. Badole\*1 and Dr Sanjeev R. Yadav2

<sup>1</sup>Assoc. Prof., Shalyatantra Dept., Dr. G.D. Pol Foundation's YMT Ayurved Medical College Kharghar, Navi Mumbai, Maharashtra, India.

<sup>2</sup>Dean, Dr. G.D. Pol Foundation's YMT Ayurved Medical College Kharghar, Navi Mumbai, Maharashtra, India.

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### ABSTRACT

Sushruta samhita the first surgical manuscript of Ayurveda science accommodates mostly surgical and parasurgical techniques. Simultaneously it is observed that it has a great contribution in pain management also. In the nidansthan which explains pathophysiology of diseases where the first place dedicated to Vatvyadhi and in that chapter all painful disorders are categorized as per the tissue i.e. *dhatu* involved in the pathophysiology. These painful disorders are named as twakagat, raktagat, mamsagat, medogat, siragat,, snayugat, sandhigat, asthigat, majjagat, shukragat. The presenting symptoms of the dhatu involvement are mostly similar to modern counterpart. While coming to management part it is observed that in chikitstasthan treatment explained is local and general both. Local treatment is indicated for painful conditions related to twakagat, raktagat, mamsagat, siragat, snayugat, sandhigat, asthigat. Further treatment protocol is grouped in two parts where anushatra procedure namely raktamokshana and agnikarma is advocated along with other snehanadi upakrama. Objectives of present review is to study anushastra for management of painful conditions as per sushruta samhita. Study material is sushruta samhita and its commentary. It is observed that raktamokshana along with other snehanadi upakrama is indicated for twakagat, raktagat, mamsagat, siragat pathologies. Agnikarma along with other snehanadi upakrama is indicated for snayugat, sandhigat, asthigat pathologies. In this paper author will try to throw light on sushruta's concept of painful disorders and explain presenting symptoms as per dhatu involved and its local management techniques of anushatra and its practical approach in today's clinical practice.

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\*Corresponding author: Dr. Shubhangi P. Badole; PhD. Scholar and Assoc. Prof., Shalyatantra Dept., Dr. G.D. Pol Foundation's YMT Ayurved Medical College Kharghar, Navi Mumbai, Maharashtra, India. Contact: +91- 9167750838, e-mail: spbadole20@gmail.com

### Introduction

Pain is defined as An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of

such damage. And to relieve pain all Medical and paramedical systems are working simultaneously with their own modalities. So as the Ayurved science also have its own local

Twakagat,

Raktagat,

Mamsagat,

therapies. All basic Samhita have explained local as well as systemic meditation and procedures for the same, but local procedures are accepted the most. Sushruta Samhita the first surgical manuscript of Ayurveda Science accommodates mostly surgical and parasurgical techniques .Simultaneously it is observed that it has a great contribution in pain management also. In the Nidansthan which explains pathophysiology of diseases where the first place dedicated to Vatavyadhi<sup>2</sup>. While explaining *chikitsa* chikitsasthan it is explained in detail in two i.e. Vatavyadhi<sup>3</sup> different chapters and Mahavatavyadhi.<sup>4</sup> Agnikarma and Raktamokshana are one of the best pain management tools, but which should be used in particular painful condition is again a question. In Chikitsasthan Sushruta has explained the answer for this. All painful disorders are categorized as per the tissue i.e. Dhatu involved in the pathophysiology which is narrated in Nidansthan. These disorders are named as

Sandhigat Siragat, Snayugat, ,Asthigat, Majjagat, Shukragatt. The presenting symptoms of the Dhatu involvement are mostly similar to counterpart.<sup>2</sup> While coming management part it is observed that Chikitstasthan treatment explained is Local and general both. Local treatment is indicated for Twakagat, Raktagat, Mamsagat, Siragat, Snayugat, Sandhigat, Asthigat painful Treatment protocol conditions. Further grouped in two parts where Anushatra procedure namely Raktamokshana and Agnikarma is advocated along with other Snehanadi Upakrama.<sup>3</sup>

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Classification of Vatavyadhi in Sushruta samhita: Nidansthan, the section of pathopysiology of Diseases in Ayurveda, where Vatavyadhi have been explained in very first chapter. While in Chikitsasthan it is explained in two different chapter –Vatvyadhi and Mahavatavyadhi and it is classified as follows,<sup>2</sup>

Table 1: Classification of Vatavyadhi According to Sushruta Samhita

Medogat,

Classification	Name of disorder	Nidansthan	Chikitsasthan
As per Type of	Diseases related to location of Pranavayu,	Vatavyadhi	Vatavyadhi
Vata	Udanvasyu, Saman Vayu, Apan vayu, Wyana vayu	nidan	chikitsa
As per organ/	Amashaya, Pakwashaya, Dnyanedriya,	adhyaya	adhyaya
tissue involved	Twakagat ,Raktagat, Mamsagat, Medogat,		
	Siragat, Snayugat, Sandhigat, Asthigat, Majjagat,		
	Shukragatt, Sarvangagat		
As per awaran	Doshawaran of Pitta or Kapha – on All five Vayu		
of other Dosha	Prakara		
Sarvadehik	Vatarakta, Akshepak, Apatanak, Pakshaghat,		Mahavatavyad
	Apatantraka		hi
Jatrurdhwa	Manyasthambha, Ardit		chikitsa
Limb disorders	Grudhrasi, Kostukasirsha, Khanja, Kalayakanja,		adhyaya
	Vatakantaka, Padadaha, Padaharsha,		
	Awabahuka, Uurusthambha		
Indriya –	Badhirya, Karnaashula, Muka, Minminitwa,		
disorders	Gadgad		
Abdomen	Tuni,Pratituni ,Adhaman,		
disorders	Pratyadhaman,Vatashtila		

Presenting symptoms of vatavyadhi where Anushatra i.e. Agnikarma or Raktamokshana is indicated:<sup>2</sup> These Vatavyadhi presenting symtoms and signs can be correlated with some modern counterparts as per the following chart.<sup>21</sup>

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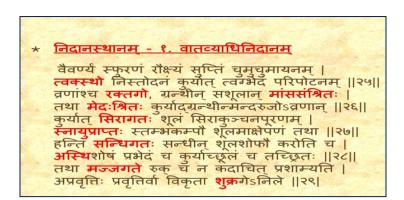


Table 2: Symptoms of Vatavyadhi which are indicated for Agnikarma or Raktamokshana: Sushruta Samhita

Vatavyadhi	Presenting symptoms as per Sushruta Samhita				
Twakagat –  Related to Skin	Supti -Numbness Cimchimayan -Tingling Todan –Priking pain	Some of symptoms can be correlated with Nerve pathologies where there is compression or degeneration in nerve at spinal or peripheral level and symptoms are seen at peripheral skin as per Dermatome theory. Cases of cervical and lumbar			
	Twakabheda –Sensation of tearing Paripotan- Spliiting of skin	spondylosis, PID can be seen with similar presentation. Some symptoms are of lymphatic pathology and circulatory insufficiency <sup>9, 27</sup>			
Raktagat,- Relalted to circulatory system	Vran utpatti –Formation of Ulcer	Due to Arterial and venous insufficiency with Neurological defect, chronic ulcer are developed <sup>12</sup>			
Mamsagat-	Shula-Pain Granthi-Stiffness	Muscular spasm causing pain and stiffness <sup>10</sup>			
Related to muscular tissue					
Siragat- Related to vesseles	Shula-pain Siraakunchana- Constriction Sirapuran-Dilatatation	Varicose veins appears torturous ,dilated and painful <sup>11</sup>			
Snayugat –	Shambha -Stiffness Kampa -Trembling	Snayu means the structure which binds the bone to stabilize its action and restore the			
Related to ligaments and fascia	Shula-Pain Aakshepan -Convulsion	shape of body .Local or general ligament spasmodic disease can be included in this <sup>13</sup>			
Sandhigat-	Sandhinash –Deformity of joint Sandhishula-Painful joint	Symptoms of Arthritis can be correlated here			
Related to Joints	Sandhishopha-Inflamation				

Asthigat-	Asthishosha ,Asthibheda -	Here Osteoporosis with pain can be	
	Incresed porosity	correlated <sup>19</sup>	
Related to	Asthishula-Pian at affected bone		
bones			
Grudhrasi-	Restricted painful movements of	Lumbago sciatic syndrome <sup>14</sup> -Sciatica	
	lower limb with referred pain from		
	waiste to Tarsal		
Vishwachi-	Bahu Karmakshayakari	Restricted movements of upper limb <sup>15,</sup> Brachial neuritis	
Kostukasirsh	Acute painful inflammation of	Synovitis of knee joint <sup>16</sup>	
a	knee joint with collection		
Khanja,	Khanja-limping of leg causing	As per pathology is at waste level can be	
	handicap movements	corrreled with spinal stenosis causing foot drop <sup>17</sup>	
Kalayakanja,	Vepathu-Trembling while walking	Luponosis causing spastic Paraplegia	
	Khanjaniv Gachati-Limping of leg		
	Shithil Bandhan- Loose joints		
	causing imbalance		
Vatakantaka,	Pain at ankle joint	As per its pathology can be said as Ankle sprain <sup>20</sup>	
Padadaha,	Daha-burning sensation while	It can be neuropathy	
	walking		
Padaharsha,	Harsh-Tingling	Peripheral neuritis <sup>23</sup>	
,	Supti- Numbness		
Awabahuka	Ansabandhan shosha	Wasting of shoulder joint <sup>18</sup> , Frozen shoulder	

## Anushatra- Agnikarma or Raktamokshana for Vatavyadhi

Anushastra<sup>26</sup> which are 14 in number and smaller in size and supposed to use for delicate patients on non availibilty of Shastra, and Agnikarma and Raktamokshana are one of them. Agnikarma is the procedure where thermal heat is used for pain management and therapeutic excision of some disease. Raktamokshana is bloodletting by vein puncture, incision by different instruments or application of Leech for various pathologies. Out of the above mention group of diseases some

Out of the above mention group of diseases some are painful where pain management tools like Agnikarma and Raktamokshana are indicated for instant relief. The list of same is narrated in below shloka. Number of sittings required is again debatable but wise answer is found to this as it should be done Atandrita means till patient get complete relief. Other local modalities like *Snehan, Abhanga, Upanaha, Mardan, Lepan, Bandhan* are also required simultaneously as per quotation in Chikitsasthan<sup>22</sup> ch.1,4,5. Some quotations in Agnikarmavidhi ch.12, Shonitawarnaniya<sup>25</sup> ch. 14 of Sutrasthana and Siravedhavidhi ch. 8 of Sharirasthan are specifically emphasize the importance of above mention Anushatra for some painful disorders.

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स्नेहाभ्यङ्गोपनाहाश्च मर्दनालेपनानि च त्वङ्गांसासृक्सिराप्राप्ते कुर्यात् चासृग्विमोत्त्रग्गम् ७

# स्नेहोपनाहाग्निकर्मबन्धनोन्मर्दनानि च स्नायुसन्ध्यस्थिसंप्राप्ते कुर्याद्वायावतन्द्रितः ५

Table 3: Types of Agnikarma or Raktamokshana for Vatavyadhi and Sites of Procedure:
Sushruta Samhita

Vatavyadhi	Ahushastra	Type of Anushastra	Site of Procedure
Twakakagat	Raktamokshana	Siravedha,Jalokaawacharan,Pracha n	At painful part of affected site
Raktagat,	Raktamokshana	Siravedha ,Jalokaawacharan <sup>6</sup>	Near to vrana
Mamsagat	Raktamokshana	Siravedha, Prachan	On affected muscle part
Siragat,,	Raktamokshana	Siravedha	Near to affected sira
Snayugat	Agnikarma <sup>5</sup>	Panchadhatu shalaka,Mrutika shalaka,Snigdha dravya	On most painful point of Snayu
Sandhigat	Agnikarma <sup>5</sup>	Suvarna,Rajat,Panchadhatu Shalaka,Sneha dravya	Painful part of Sandhi- Joints
Asthigat	Agnikarma <sup>5</sup>	Suvarna,Rajat,Panchadhatu Shalaka, Sneha dravya	Painful part of Bone
Grudhrasi,	Raktamokshana	Siravedha <sup>7</sup>	Four Angula above or below Janu (knee)
Vishwachi	Raktamokshana	Siravedha <sup>7</sup>	Four Angula above or below Karpur (Elbow)
Kostukasirs ha	Raktamokshana	Siravedha <sup>7</sup>	4 angula above Gulpha – Medial Malleolus
Khanja,	Raktamokshana	Siravedha <sup>7</sup>	-//-
Kalayakanja	Raktamokshana	Siravedha <sup>7</sup>	-//-
Vatakantaka	Raktamokshana	Siravedha <sup>7</sup>	Two Angula above Khipramarma-between 1 <sup>st</sup> and 2 <sup>nd</sup> metatarsal
Padadaha,	Raktamokshana	Siravedha <sup>7</sup>	-//-
Padaharsha,	Raktamokshana	Siravedha <sup>7</sup>	-//-
Awabahuka	Raktamokshana	Vedhan <sup>7</sup>	In middle of Shoulder joint
Vatrakta	Raktamokshana	Siravedha <sup>3</sup>	Sarvadehic – General - Karpur Pradesh-Cubital region

In Uttartantra i.e. second part of Sushruta Samhita it is stated that if no relief of pain by Raktamokshana then Agnikarma should be done without hesitation at the same points.<sup>24</sup> This is

supported by quotation in Sutrasthan Agnikarma vidhi where Agnikarma is indicated for all painful conditions from Skin to Bone. <sup>5,8</sup>

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त्वश्चांससिरास्नायुसन्ध्यस्थिस्थितेऽत्युग्ररुजेवायावुच्छ्रितकठिनसुप्तमांसेव्रणे .... सन्धिसिराच्छेदनादिषु नाडीशोणितातिप्रवृत्तिषु **चाग्निकर्म** कुर्यात्॥

### **Discussion**

Acharya Sushruta has explained all painful disorders in the chapter Vatavyadhi Nidansthana and classified them as per types of vata, affected body part, conjunction with other Dosha and Generalized diseases with their presenting symptoms. One can correlate them with modern counterpart for better understanding and proper diagnosis with reliable investigations. Local treatment measures are more preferred as Vata is widely spread and local therapies help to pacify it. Choice of local measures require knowledge of exact type of Vatavyadhi and for that study of Sushruta's concept of its presenting symptoms is much needed as local measures totally depend on body tissue involved in pathopysiology.

4<sup>th</sup> chapter of Chikitsasthan explains Agnikarma for painful condition of Snayu, Sandhi and Asthi as they are deep seated and hard tissues where penetration of energy is expected. Shalaka should be selected as per disease location.

Raktamokshana is described as per its types in chapters Jalukawacharaniya and Shonitawarnaniya in Sutrasthan Siravedhavidhi in Sharirasthan where it is stated to be almost half treatment of indicated pathologies. Adding to this even it is stated that if disease is not getting cured with other measures Raktamokshana should be tried. When in painful conditions presenting symptoms are related to Twacha, Mamsa, Rakta and Sira Raktamokshana is indicated. **Type** Raktamokshana is decided as per Dosha dominance and depth of disease, in superficial skin and subcutaneous pathologies Prachan with Shrunga or Allabu and in deep seated Jalauka and for generalized and some specific Siravedha is preferred.

11<sup>th</sup> Chapter of Sutrasthan Agnikarmavidhi explains all about Agnikarma methodology and it is said to be instant pain relief. Where Agnikarma is indicated for pain relief of disease related to Twacha, Mamsa, Sira, Snayu, Sandhi, Asthi where Twakagat Agnikarma is expected for pain relief.

Same is again mentioned in Uttartantra i.e. second part of Sushruta Samhita, it is stated that if no relief of pain by Raktamokshana then

Agnikarma should be done without hesitation at the same points.<sup>24</sup> This is supported by quotation in Sutrasthan Agnikarma vidhi where Agnikarma is indicated for all painful conditions from Skin to Bone.<sup>5</sup> As Acharya Sushruta mention these two under same chapter of painful conditions, it proves their clear cut indications and limitations. Comparative superiority between these two modalities are not required as their indications are different and mode of action is also varies. Mode of action is not specified in Samhita but assumed theories can be cited at various research papers which has to be searched out with scientific evidence.

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Number of sittings required is again debatable but wise answer is given to this as it should be done Atandrita means till patient get complete relief.

### Conclusion

Agnikarma and Raktamokshana are types of Anushastra are renowned for their multifunction therapeutic uses their use still as management modality is scientific and unique as per Ayurved science. Study of Sushruta's concept of painful disorders and use of these modalities to treat the same is need of today to substitute hazardous medicinal drugs. To decide the option in them for pain relief is well mention in Susruta Samhita .Combination therapy of both is advisable in mix presentation of symptoms of two pathology eg. Siravedha followed by Agnikarma in Gridhrasi which has symptoms of Twakagt. Kandaragat, Sanyugat pathology. Many research studies are done on individual therapies for pain relief still more experimental clinical studies of combination therapy of Raktamokshana and Agnikarma will prove some of the concepts of pain management of Sushruta samhita.

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### **Conflicts of Interests**

Authors do not have any conflicts of interest with the publication of the manuscript.

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