

## AN INTRODUCTION TO CONCEPTS AND DIAGNOSIS OF PRANASHTA SHALYA- A REVIEW ARTICLE

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### ABSTRACT

*Shalya* is a main threat that disturb the comfort (*sukha*) of a person that eventually leads to various diseases or death. *Pranashtashalya* comprises of two words *pranashta* and *shalya*. *Pranashtashalya* in the sense denotes non procurable foreign particles lost in body. Acharya Susrutha mentioned about this in twenty sixth chapter of *Susrutha Samhita sootra stana* which is considered as one of the pillar stones of *shalya tantra*. Acharya Susruta managed to trace out, remove or manage the foreign particles lost in the body from signs and symptoms exhibited by the subject and also using the diagnostic techniques

designed by him. Some of the techniques that were used those days are now also practiced.

### INTRODUCTION

*Shalya tantra* is considered one among the eight branches (*ASHTANGAS*) of *Ayurveda*.<sup>[1]</sup> It deals with removal of *shalya* (foreign bodies), the descriptions of *yantra*, *shastra*, *kshara*, *agni*, description of *vrana* (wound) and its management.<sup>[2]</sup> Acharya Susruta has considered *shalya* as a main threat that disturb the comfort (*sukha*) of a person that eventually leads to various diseases or death.<sup>[3]</sup> Acharya Susruta managed to trace out the foreign particles lost in the body from signs and symptoms exhibited by the subject using the diagnostic techniques designed by him. Some of the techniques that were used those days are now also practiced.

*Pranashtashalya* comprises of two words *pranshta* and *shalya*. *Pranashta* in the sense denotes non procurable. *Shalya* is anything that cause discomfort to complete body. Acharya Chakrapani highlights the importance of knowing *shalyas* that are dislodged inside the body<sup>[4]</sup> *Shalya* is categorized generally in to *Shaareerika* and *Agantuja*. The body get

dooshita by danta, roma, nakha, dhatu, anna, mala are shaaririka and those does dooshana from outside is called agantuja.<sup>[5]</sup>

### **Shalya adhikaara**

Under the heading of *shalya adhikara* Acharya mentions about the superiority of *loha* (iron weapons) among all *shalyas* because of its cutting ability. Acharya Dalhana comments “*adhikaro hi योग्यत्वम्*” which means “exact quality that defines nature of anything” is denoted by word *adhikara*. Acharya Susruta mentions about arrow (*shara*) in detail considering its properties like easy entry to body, pointed tip, and its exclusive property of meeting distant targets. Acharya briefs it in to two types *karni* (with barb) and *shlakshna* (without barb).<sup>[7]</sup> This classification helps the surgeon to remove the arrow without complication. The description once clarifies the deep knowledge *Susrutha* in management of casualties during war.<sup>[8]</sup>

### **Shalya gati**

*Shalya gati* is five as mentioned by Acharya. It concentrate on mechanism of injury. Application of that knowledge to locate and remove shalya.

They are *urdhwa, adha, tiryak, riju, arvacheena* directions

No	Gatis	Description
1.	<i>Urdhwa gati</i>	Force of impact is from down to upward with respect to body
2.	<i>Adhogati</i>	Force of impact is from upward to downwards with respect to body
3.	<i>Arvacheena gati</i>	Force of impact is from dorsal plane towards anterior plane with respect to body
4.	<i>Tiryak gati</i>	Force of impact is from lateral planes towards medial aspect with respect to body
5.	<i>Riju gati</i>	Force of impact is from anterior plane towards dorsal plane with respect to body

### **Shalya aashraya**

*Shalya* get trapped inside the body due to three reason<sup>[10]</sup>

- Inadequate force to penetrate the body
- Retardation
- Due to any obstacle in its path.

Due to any of these above reason the *shalya* take *ashraya* in *twagadi vranavasthu, dhamani, srotas, asthivivara peshi* and produce discomfort.

### **Samanya and visesha lakshanas of pranashtha shalya**

Acharya Susruta mentions signs and symptoms of *Shalya* lost in body under two headings:

- 1.) General signs and symptoms<sup>[11]</sup> on site of impaction.
  - Dark bluish in colour
  - Seems to be filled with carbuncle
  - Shows inflammatory signs such as oedema and tenderness
  - Frequent bleeding
  - Blister formation with soft surrounding tissues.
  
- 2.) Specific signs and symptoms according to *ashraya* (location) of *shalya* inside the body.<sup>[12]</sup>
  - *Shalya* seated in *twak* exhibits change in normal skin colour along with large and hard swelling.
  - *Mamsa aashrita shalya* exhibit severe swelling along with closure of entry wound and tenderness as signs along with burning and tenderness.
  - *Pesigata shalya* also exhibits features of *mamsashrita shalya* excluding burning sensation and *paka*.
  - *Siraashrita shalya* exhibits swelling, distention, pain on the *siras*
  - *Snayugata shalya* exhibits severe pain, inflammation, elevation of the network of *snayu*.
  - *Srotogata shalya* impaires the functions of the *srotas*.
  - *Dhamanigata shalya* the blood will flush out with froath along with expulsion of air that result in sound, the patient feels thirst, fainting and body pain.
  - *Shalya* having *ashraya* in *asthi* exhibits symptoms like various pain sensations and odema
  - In *asthi vivara gata shalya* subjects shows pricking pain and heavy horripilations along with felling of fullness in *asthi*.
  - *Sandhigata* exhibits features of *asthigata shalya* along with it will hamper range of movements.
  - *Koshtagata shalya* results in *atopa* and *anaha* along with traces of *mutra*, *purisha* or *aahara* near the wound.
  - *Marmagata shalya* shows *marma viddha lakshanas* respectively according to *adishtana* where *marma* is located.

*Acharya Susrutha* tells about the vital findings that help the *Vaidya* to differentiate whether *shalya* is present inside the body or not. This description helps a lot for quick evaluation in aspect of diagnosis as well as evaluating the efficacy of removal done.<sup>[13]</sup>

Acharya mentions in observation on signs that are shown by patient

<b>Shalya present</b>	<b>Shalya absent</b>
<i>Toda</i> (Pricking pain), <i>Raga</i> (Discolouration) and <i>Paka</i> (Suppuration)	minimal swelling ,minimal discomfort , no pain and no complications
loss of sensation over the area	subject seems to be comfortable
On application of pressure the patient will always touch and guard the affected area.	The surrounding tissues of wound can be elicited as soft, non-elevated and won't feel any particles moving inside
Intense bleeding	Vaidya can completely do probing ( <i>eshana</i> ) without any difficulty using a <i>shalaka</i> .
	Doesn't feel any discomfort in movement of the affected area.

### ***Pranashta shalya jnanopaaya.***

Acharya developed various techniques for tracking *shalya* lost in the body.

He mentions it under two headings.

#### **1) *Samanya lakshanas*<sup>[14]</sup>**

Riding animals, indulging in strenuous activities, fasting, swimming, exercise, expulsion of vegas like *jrimba*, *udgara*, *kaasa*, *kshavadu*, *shteevana* *hasana*, *mootra*, *purisha* and *pranayama* may leading to severe pain and inflammation indicate the presence of *shalya* lodged inside the body.

#### **2) *Vishesha lakshanas*<sup>[15]</sup>**

Acharya also explained its signs and symptoms to elicit the location (*adishtana*) of *shalya* based on *twak mamsa*, *sira*, *snayu*, *sandhi asthi* and *marma*.

- *Twak pranashta shalya* exhibits reddishness, pain and odema if the subject is pressure massaged with mud (*mrut*), *gomaya* (cowdung), *masha* after *snehana* and *swedana*. Application of solidified *ghruta* over the *twak* may result in liquefaction or loss of quantity of *ghruta* due to *ushma* of *twak stitha shalya*.
- In *mamsa pranashta shalya* after *snehana* and *swedana karma* and *virudha vihara* leads to *karshana* of victim and the *shalya* loses its fixation within *mamsa* and cause inflammation.
- The person who is suspected to have *shalya* in *sira*, *dhamani*, *srotas*, *snayu* will exhibit severe inflammation and pain if made to travel in a cart with broken wheels with high velocity on a uneven surface.
- In case of *asthi pranashta shalya* after proper *swedana* and *snehana* the patient is advised to perform bandaging or pressure application immediately over the site may result in severe inflammation and pain over the area.

- In case of sandhi *pranashta shalya* the subject is advised for *snehana* and *swedana* immediately followed by movements of joints. If subject exhibit symptoms of pain and inflammation confirms the presence of *pranashta shalya* in the *sandi pradesha*.
- The *Marmas* are located in *Twagadi vranavasthu* which are 8 in number. So keeping the location and type of *Marma* in consideration *Vaidya* should adopt the *Twakadi gyanopayas*.

### Fate of shalya inside the body

After the brief description of signs and symptoms followed by examinations for ruling out the *shalya ashraya* then he describes the fate of *shalya* lost on human body.<sup>[16]</sup>

- *Asthi shalyas* gets degenerated and fragmented while iron and *shankha* will not get fragmented.
- Presence of particles of tree, bamboo or grass can immediately result in *pachana* of *rakta* and *mamsa* if not removed immediately.
- Metals like *kanakam*, *tamram*, *kasisam*, *tamram*, *pittala* or *trapu* will get dissolved in body due to the *tejas* imparted by *pitta dosha* in the body.
- The *kamsya* and *rajata* which are usually *sheeta* and *mrudu* swabhava will melt and get unified with *sarira* along with *dathus*.
- Horns of various animals, teeth, hair, bone, stone and mud won't get disintegrated inside human body

### DISCUSSION

*Pranashta shalya* is considered as any foreign particle lost in human body which is not visible to naked eye. This *shalya* gets lodged in *twak mamsa*, *sira*, *snayu*, *sandhi asthi* and *marma* produce discomfort. *Acharya Sushruta* mentions *vruksha*, *venu*, *truna* does *paka* of *rakta* and *mamsa* rapidly and produce discomfort to the body while metals like *kanaka* (gold) will dissolve in the body with the help of heat imparted by *pitta dosha* (*pitta tejus*) and does not give any discomfort. Presence of *shalya* (foreign particle) shows clinical manifestations such as discolouration (*Raga*), Tenderness (*paka*), Edema (*shopha*) in common. *Acharya Sushruta* mentioned technique of probing (*Eshana karma*) to detect the presence of *shalya*. *Acharya Sushruta* mentioned importance and relevance of force of impaction of *shalya* (*salya gati*) for localizing the lost foreign particle inside the body. *Acharya Sushruta* mentioned *sashalya lakshana* and *nishalya lakshana* in general for confirming whether *shalya* is present or not. On analysing the above facts and relating to contemporary techniques. *Acharya*

*Susrutha* used simple techniques for diagnosing foreign bodies that can be found practical now also and also practicing. The chapter is the foundation to the techniques of removal of foreign particles.

## CONCLUSION

- *Pranashtashalya jnanopaya* (localization of hidden foreign) are some valuable Knowledge we can comprehend from the classics with lot of scientific background behind them.
- Examination is mandatory before any diagnosis and for further intervention. When there is a *shalya* lodged inside & moreover ignored, its progression can cause a severe disease or permanent disability.
- The physician or surgeon needs a complete knowledge, keen observational skills, examination tactics and an intelligent mind to locate the *pranashtashalya*.
- In olden days *Vaidyas* were able to find out the foreign bodies with limited resources, but in present era advanced techniques are available to detect even the minute foreign bodies in different parts of body.

## REFERENCES

1. Acharya Vaidya Jadvji Trikamji and Acharya Narayana Ram 'Kavyatirtha' editors. Sushruta Samhita of Susrutha with the Nibandhasangraha Commentary of Dalhanacharya. Varanasi: Chaukamba Sanskrit Sansthan; Reprint, 2014; 3.
2. Acharya Vaidya Jadvji Trikamji and Acharya Narayana Ram 'Kavyatirtha' editors. Sushruta Samhita of Susrutha with the Nibandhasangraha Commentary of Dalhanacharya. Varanasi: Chaukamba Sanskrit Sansthan; Reprint, 2014; 3.
3. Acharya Vaidya Jadvji Trikamji and Acharya Narayana Ram 'Kavyatirtha' editors. Sushruta Samhita of Susrutha with the Nibandhasangraha Commentary of Dalhanacharya. Varanasi: Chaukamba Sanskrit Sansthan; Reprint, 2014; 3.
4. Acharya Vaidya Jadvji Trikamji and Acharya Narayana Ram 'Kavyatirtha' editors. Sushruta Samhita of Susrutha with the Nibandhasangraha Commentary of Dalhanacharya. Varanasi: Chaukamba Sanskrit Sansthan; Reprint, 2014; 121.
5. Acharya Vaidya Jadvji Trikamji and Acharya Narayana Ram 'Kavyatirtha' editors. Sushruta Samhita of Susrutha with the Nibandhasangraha Commentary of Dalhanacharya. Varanasi: Chaukamba Sanskrit Sansthan; Reprint, 2014; 121.

6. Acharya Vaidya Jadvji Trikamji and Acharya Narayana Ram 'Kavyatirtha' editors. Sushruta Samhita of Susrutha with the Nibandhasangraha Commentary of Dalhanacharya. Varanasi: Chaukamba Sanskrit Sansthan; Reprint, 2014; 121.
7. Acharya Vaidya Jadvji Trikamji and Acharya Narayana Ram 'Kavyatirtha' editors. Sushruta Samhita of Susrutha with the Nibandhasangraha Commentary of Dalhanacharya. Varanasi: Chaukamba Sanskrit Sansthan; Reprint, 2014; 121.
8. Acharya Vaidya Jadvji Trikamji and Acharya Narayana Ram 'Kavyatirtha' editors. Sushruta Samhita of Susrutha with the Nibandhasangraha Commentary of Dalhanacharya. Varanasi: Chaukamba Sanskrit Sansthan; Reprint, 2014; 34.
9. Acharya Vaidya Jadvji Trikamji and Acharya Narayana Ram 'Kavyatirtha' editors. Sushruta Samhita of Susrutha with the Nibandhasangraha Commentary of Dalhanacharya. Varanasi: Chaukamba Sanskrit Sansthan; Reprint, 2014; 122.
10. Acharya Vaidya Jadvji Trikamji and Acharya Narayana Ram 'Kavyatirtha' editors. Sushruta Samhita of Susrutha with the Nibandhasangraha Commentary of Dalhanacharya. Varanasi: Chaukamba Sanskrit Sansthan; Reprint, 2014; 122.
11. Acharya Vaidya Jadvji Trikamji and Acharya Narayana Ram 'Kavyatirtha' editors. Sushruta Samhita of Susrutha with the Nibandhasangraha Commentary of Dalhanacharya. Varanasi: Chaukamba Sanskrit Sansthan; Reprint, 2014; 122.
12. Acharya Vaidya Jadvji Trikamji and Acharya Narayana Ram 'Kavyatirtha' editors. Sushruta Samhita of Susrutha with the Nibandhasangraha Commentary of Dalhanacharya. Varanasi: Chaukamba Sanskrit Sansthan; Reprint, 2014; 122.
13. Acharya Vaidya Jadvji Trikamji and Acharya Narayana Ram 'Kavyatirtha' editors. Sushruta Samhita of Susrutha with the Nibandhasangraha Commentary of Dalhanacharya. Varanasi: Chaukamba Sanskrit Sansthan; Reprint, 2014; 124.
14. Acharya Vaidya Jadvji Trikamji and Acharya Narayana Ram 'Kavyatirtha' editors. Sushruta Samhita of Susrutha with the Nibandhasangraha Commentary of Dalhanacharya. Varanasi: Chaukamba Sanskrit Sansthan; Reprint, 2014; 123.
15. Acharya Vaidya Jadvji Trikamji and Acharya Narayana Ram 'Kavyatirtha' editors. Sushruta Samhita of Susrutha with the Nibandhasangraha Commentary of Dalhanacharya. Varanasi: Chaukamba Sanskrit Sansthan; Reprint, 2014; 123.
16. Acharya Vaidya Jadvji Trikamji and Acharya Narayana Ram 'Kavyatirtha' editors. Sushruta Samhita of Susrutha with the Nibandhasangraha Commentary of Dalhanacharya. Varanasi: Chaukamba Sanskrit Sansthan; Reprint, 2014; 124.