

SIGNIFICANCE OF SHATKRIYAKAL IN THE MANAGEMENT OF VRANASHOPHA

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Medical Officer (IM)², Institute of Medical Sciences, Banaras Hindu University, Varanasi**Abstract**

In Ayurveda aetiopathogenesis of a disease i.e. progression of a disease is explained under the heading “shat-kriyakal” viz. *sanchaya*, *prakopa*, *prasara*, *sthanasanshraya*, *vyakti*, and *bheda*. These six stages are basically the six occasions for a clinician to treat the ailment before it reaches to severity. It conceives that at every stage the disease can either be aborted or cured without leading to the successive stages with the help of proper and needful treatment. Thus, the concept of shat-kriyakala is helpful in diagnosis, prognosis, prevention and treatment of diseases and it was described by Sushruta in the context of *vrana* (wound) and *vrnashopha* (inflammatory swellings). Present article reviews the significance of shatkriyakala in the manifestation and management of *vrnashopha*.

Keywords: *Vranashopha*, *shat-kriyakala*, *inflammatory swellings*, *shashti upakrama*, *vrana*.

Introduction

Inflammation or swellings are described in Ayurveda by the term *shotha*. It is very wide term used for both local as well as internal organs' swellings and inflammations. *Shvayathu* and *shopha* are the other terms used in *samhita* to denote an unnatural elevation of a part or whole of the body. Detailed description of *shotha*, its classification, symptomatology, complications and management is mentioned in *Charaka samhita* also but as far as its surgical aspect is concerned, it is well defined by *Sushruta*, the father of ancient Indian surgery. *Sushruta* has defined *shopha* as a localized swelling in any part of body involving the skin and the underlying flesh which may be even or uneven, massive and knotty or nodular in consistency. As per the pathogenesis is concerned, it is described that the vitiated *vata dosha* first displaces *kapha*, *pitta* and *rakta* and pushes them to different channels of the body. Further, these morbid elements obstruct the path of *vayu* and causes accumulation of *kapha*, *pittta* and *rakta* in between *twak* (skin) and *mamsa* (muscle) which results in a swelling or *shopha*. *Sushruta* again cautions that differentiation should be made from other clinical entities such as glandular enlargements, abscesses etc. which are also associated with a swelling¹. As far as the classification is concerned, *Charaka* mentioned three types of *shotha*; *vataja*, *pittaja* and *kaphaja*² while *Sushruta* mentioned six types of *shopha*; *vataja*, *pittaja*, *kaphaja*, *sannipattaja*, *raktaja* and *agantuja*³.

The production of any disease or lesion depends upon three factors; *nidana* i.e. the etiological factors and circumstances, *dosha* i.e. the body humors or forces and the *dushya* i.e. the tissue components. According to the theories of Ayurveda, the imbalanced state of *doshas* leads to pathogenesis of the disease. *Sushruta* believed that the process of the pathogenesis has a definite sequential pattern, consisting of six stages or what may also be called as the six occasions for the treatment called as *shat-kriyakala*⁴. He conceives that at every stage, the disease can either be aborted in its progress or cured without leading to the successive stages with the help of proper management. If the vitiated *doshas* are managed at the earliest, they do not progress to the further stages of pathogenesis, otherwise in the later stages they would become more and more severe and harmful⁵. Hence, the concept of *shat-kriyakala* describes the mode and the stages of development of a disease in particular. This article discusses the concept and significance of *shat-kriyakala* in the manifestation and management of *vrnashopha*.

Shat-Kriyakala and Vranashopha

1. **Sanchaya Awastha** (Stage of Accumulation) – It is the budding stage of disease wherein the vitiated *doshas* accumulate or intensify at their own site. *Dalhana*, the commentator on *Sushruta samhita*, has defined this stage as of intensification of *doshas*. At this stage, the symptomatology is usually vague and ill defined. Generally, there is malaise, satiety, decreased appetite, lethargy with a sense of heaviness in body and distaste develops towards the factors that may cause *dosha* accumulation⁶. This is the first sign that should gain the attention of a physician.
2. **Prakopa Awastha** (Stage of Aggravation) – In this stage, the previously accumulated *doshas* get excited and aggravated though they remain within their own sites. *Doshas* (*vata*, *pitta* and *kapha*) have their own causes of vitiation and this phase is stated to be characterized by the symptomatology specific to the *doshas* involved. There may be abdominal (cramping) pain, flatulence (due to *vata*), heart-burn, sour eructation, thirst (due to *pitta*), nausea with aversion to food (due to *kapha*). This is the second stage of the pathogenesis

of a disease⁷ which gives a clinician a second opportunity to learn that vitiation of *doshas* is progressing and requires treatment to stop their further progression.

3. **Prasara Awastha** (Stage of Dissemination) – The term *prasara* means to spread out of the boundaries. At this stage, the previously excited *doshas* accumulate and aggravate to such an extent that they leave their original seats in the body and extend to other parts. Thus, they overflow the limits of their respective sites. The manifestation of this stage is again characterized by the *dosha* specific symptoms such as flatulence due to *vata*, feeling of thirst, burning sensation in the throat and body due to *pitta* and anorexia, indigestion, lethargy and vomiting due to *kapha*. This progressive aggravation of *doshas* may involve one, two or all the three *doshas* which may even involve *rakta* with them and expand all over the body in all the directions⁸. This is the third stage of pathogenesis of a disease or the third opportunity for treatment to abort the disease process.
4. **Sthana-Samshraya Awastha** (Stage of Relocation) – It is the fourth phase of *shat-kriyakal*, which is the stage of relocation or allocation of *doshas*. The word *sthana-samshraya* refers to localisation at some place. In this stage, the aggravated and spreading *doshas* interact with a particular *dushya* (which is said to be prone to a particular disease due to *kha-vaigunya*), get localized there and express the prodromal symptoms pertaining to a particular disease. The nature, site and the degree of manifestation of the disease is decided by the factors such as *nidana*, the *doshas* vitiated, the *dushyas* affected, and the *ashaya* where the *sthan-samshraya* or localization of the *doshas* has occurred^{9,10}.
5. **Vyakta Awastha** (Stage of Manifestation) – *Vyakta* means which can be visualized. In this stage, well differentiated and clear symptoms of a disease appear. *Dalhana* has called this stage as the stage of manifestation of disease. In this stage, clinical features are well produced and one can easily identify and differentiate the particular disease¹¹.

In case of *vranashopha*, the disease may manifest in three stages; *amawastha* (stage of early inflammation), *pachyamanawastha* (stage of true inflammation) and the *pakwawastha* (stage of suppuration) with each have its own symptoms. While the *amawastha* is characterized by a mild localized swelling with mild pain and induration and a little rise in local temperature, the *pachyamanawastha* manifest with localized pain of varying degree and nature, burning sensation, skin discoloration and systemic features like pyrexia, anorexia and thirst. During *pakwawastha*, the symptoms of a well formed abscess appear like wrinkling of skin, fluctuation due to pus, pitting on pressure, itching etc.¹²

6. **Bheda Awastha** (Stage of Disruption or Complications) – The last stage of *shat-kriyakala* is defined as the stage of *updrava* i.e. complications which may occur if the disease is not treated in the previous stage. If not treated properly even in this stage, the disease becomes incurable¹³.

If a *vranashopha* or abscess is not attended even in the *pakwawastha*, it may either burst outside with drainage of pus and convert into an ulcerated lesion or may extend to the deeper tissues forming sinuses or fistulae and become difficult to treat¹⁴.

Management of Vranashopha

The management of *vranashopha* should aim at to manage it in the early stage to avoid suppuration and more tissue harm. *Sushruta* has described seven principle measures for the management of inflammatory lesions¹⁵ (Table 1). Apart from this, the initial twelve procedures of *shashti upakrama* (the sixty therapeutic principles or measures for wound management) have also been described for the management of *vranashopha*¹⁶, as it is often the preceding stage before the formation of a wound or ulcer. If we analyze carefully, these twelve procedures as well as whole of the *shashti upakrama* may be incorporated in the seven measures described below.

1. **Vimlapana** – It means a massage with gentle pressure over the indurated swellings with mild pain which denotes the stage of *amavastha*. It should be preceded by the local anointing (*abhyanga*) and sudation (*swedana*). These procedures improve the local circulation and helps in relieving the inflammation.

According to *Dalhana*, the procedures of *aptarpana* (absolute or relative abstinence from food), *aalepa* (application of local soothing pastes) and *parisheka* (spraying of liquid medicaments) described under *shashti upakrama* may also be included in this measure. While *apatarpana* tend to pacify the vitiated *doshas*, *aalepa* and *parisheka* are used to allay the pain and burning sensation in the lesion¹⁷.

2. **Avasechana** – *Avasechana* means the elimination of *vikrit doshas* (i.e. the pathogenic factors) from the body. This includes the measures like *visravana* (therapeutic bloodletting), *vamana* (emesis therapy) and *virechana* (purgation therapy). The therapeutic bloodletting decreases the local congestion and the local

pooling of inflammatory cytokines and thus relieves the inflammation and prevents its suppuration. While *vamana* is indicated in *kaphaja* lesions, *virechana* is indicated in *pittaja* or chronic lesions¹⁸.

3. **Upanaha** – This includes the use of poultice (*upanaha*) to relieve the *amashopha* or to induce suppuration in the *vidagdha* or *pachyamana shopha*. This measure also includes the application of medicines of hot potency like *Moringa oleifera*, sesame, mustard etc. (*pachana*) to induce suppuration in the *vranashopha* which does not relieve by the measures mentioned above¹⁹.
4. **Patana** – When the inflammatory lesion suppurates by itself or by *upnaha* or *pachana*, it requires surgical drainage by a small incision (*bhedana*) or completely laying it open (*patana*) to clear the pus and the other debris and may involve the use of other surgical procedures also. This results in the formation of a wound or ulcer.
5. **Shodhana** – After a wound or ulcer is resulted, it may either heal by itself after surgical drainage or it may require dressing with antiseptic or wound cleansing drugs as the wound will not heal if it is not clean. Several drugs and preparations have been advised by *Sushruta* for *vrana shodhana*.
6. **Ropana** – Once the wound is converted into a clean wound, the medications and drugs having wound healing property like *panchavalkala*, honey, sesame, neem etc. are used to dress the wound. These *shodhana* or *ropana* drugs may be prepared in the form of seven pharmaceutical preparations²⁰ viz. decoctions, powders, concentrates, medicated wicks or pastes or the ghee or oil based preparations depending upon the nature and character of wound bed.
7. **Vaikritapaham** – Wound or ulcer usually heals with a scar formation which may sometimes pose cosmetic problems in being hypertrophied, weak, devoid of hair follicles, depigmented and/or densely pigmented. *Sushruta* also gave due consideration to these and prescribed some cosmetic measures to treat these complications and restore the normalcy to the scar. The process of cosmetic corrections was termed as *vaikritapaham* and it is a special contribution of *Sushruta* to the surgical sciences.

Discussion

The principles and practices of Ayurveda revolve around the theory of *tridosha* i.e. *vata*, *pitta* and *kapha*. They have been told to maintain the physiological processes of the body in their balanced state and to cause diseases in their vitiated states²¹. The process of development of disease involves various degree or stages of vitiation of *doshas* and their interaction with the body tissues or the *dushyas* resulting in manifestation of various symptoms. This six-stage process of development of disease i.e. the pathogenesis of disease is termed *shat-kriyakala* in Ayurveda. Each stage of this sequential process produces symptoms which need attention and treatment to disrupt this process to go to further stages. The symptoms produced in the first three stages, until the *doshas* have not localized to a particular site, are vague symptoms produced by *doshas* only and are not specific to a particular disease. Such symptoms are usually ignored by both the patients and the clinicians and result in manifestation of the disease. During the fourth stage when the *doshas* get localized to a particular part of body, the symptoms that manifest are not that of the involved *dosha* only but also that of the involved *dushya* and constitute the prodromal stage of any disease. Many a times, these symptoms are also ignored by the patient and the clinicians. They only attend and treat a disease in its *vyakta* or *bheda awastha*. The whole purpose of describing the concept of *shat-kriyakala* by the ancient teachers of Ayurveda is to emphasize upon to understand the importance of even these earlier stages and vague symptoms in the process of management of a disease. One must not wait until the *vyakta* or *bheda awastha* to treat but he/ she must be attentive even to small, vague and non-specific complaints of the patient as well.

Vranashopha is the preceding stage of *vrana* (wound or ulcer). Following the principles of *shat-kriyakala*, *Sushruta* has given much importance to the management of this prodromal stage also. It is evident that a *vranashopha*, if not treated at earlier stage (*amawastha*), will progress to become an abscess which may get complicated by the formation of ulcerated lesions or the deep seated sinuses or fistulae if not treated properly. *Sushruta* described seven principle measures to treat and manage various stages of *vranashopha* or *vrana* in the later stages which also follow the principles of *shat-kriyakala* i.e. the six occasions of treatment of a disease.

Conclusion

Shat-kriyakala is very unique concept of Ayurveda which not only explains the pathogenesis of a disease but also reminds the clinician about the importance of an early and prompt diagnosis and treatment to avoid complications. If treated at the early stages, the disease does not progress further. Keeping these principles in mind, *vranashopha* may be treated or managed carefully and the complications like the formation of a chronic wound, sinuses or fistulae may be avoided.

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