

A PRACTICAL APPROACH OF *SHATKRIYAKALA* IN *ANNAVAHA SROTO VIKARA* DIAGNOSIS

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ABSTRACT

Introduction: Understanding the etio-pathogenesis of a disease through a riveting concept of “*Kriyakala*” plays an important role in diagnosis, practical understanding of disease process and thereby management. The diseases like *Amlapitta* and *Grahani* are one of the most common diseases of *Annavaha Srotas* which are dealt in daily practice. Hence, the present review deals with process of diagnosing *Annavaha Sroto Vikara* in light of *Shatkriyakala* concept. **Materials And Methods:** For the present study, classical texts of *Ayurveda*, case studies of *Amlapitta* and *Grahani* were referred to understand the practical aspect of *Shatkriyakala*. **Result:** In the diseases of *Annavaha Srotas* like *Amlapitta* and *Grahani*, detecting the particular disease

stage through its symptoms in accordance to *Shatkriyakala* is appreciated in the present study. **Discussion:** In the initial three stages of *Shatkriyakala*, diagnosis of a disease cannot be established but with the help of its symptoms based on *Doshas*, early identification can be made and disease progress can be ceased. As the disease establishes in the further stages of *Shatkriyakala*, symptoms of *Amlapitta* and *Grahani* can be practically employed to diagnose the exact stage of the disease and thereby to plan the treatment.

KEYWORDS: *Shatkriyakala*, *Annavaha Sroto Vikara*, *Amlapitta*, *Grahani*.

INTRODUCTION

Early diagnosis helps in the management of a disease during its early stages. Hence, knowing the etio-pathogenesis of the disease plays an important role. In *Ayurveda*, a riveting concept of *Kriyakala* has been put forward to understand the disease process.

The term *Kriyakala*, also known as *Chikitsa Avasara* is the time denoting the necessity of treatment. The term *Shatkriyakala* is comprised of 3 words namely, '*Shat*' meaning the number six, '*Kriya*' referring to the action or treatment and '*Kala*' denoting the time period. Thus, *Shatkriyakala* represents the six stages of disease process and the appropriate time period to take measures for the management of it.

In *Ayurveda*, the root cause of all the diseases is said to be *Mandagni*.^[1] Hence, the *Dushti* of *Annavaha Srotas* can be appreciated either directly or indirectly in almost all the diseases. The most commonly encountered diseases of *Annavaha Srotas* in daily practice are *Amlapitta* and *Grahani*, and applying the knowledge of *Shatkriyakala* can play an important role in diagnosing, practical understanding of each stage in disease process and thereby its management.

OBJECTIVES

- To re-evaluate the concept of *Shatkriyakala* and discuss it in purview with *Annavaha Sroto Vikara* diagnosis.
- To understand the *Samprapti* (pathogenesis) of a disease with respect to *Shatkriyakala*.
- To understand practical approach of *Shatkriyakala* for the diseases *Amlapitta* and *Grahani*.

MATERIALS AND METHODS

The present study is based on the review of *Shatkriyakala* with its practical applicability (case studies). Data related to *Shatkriyakala*, *Annavaha Srotas*, *Amlapitta* and *Grahani* were collected. The main *Ayurveda* texts used for the study are *Charaka Samhita*, *Sushruta Samhita*, *Ashtanga Hrudaya* and *Madhava Nidana*. Case studies of *Amlapitta* and *Grahani* were referred to understand the practical aspect of *Shatkriyakala* concept.

CONCEPTUAL REVIEW

Concept of *Shatkriyakala*

Acharya Sushruta has introduced the unique concept of *Shatkriyakala* in the chapter *Vranaprashna*, where he had explained the consecutive stages of disease manifestation, its complications and preventive measures during each stage to overcome from it.

Kriyakala indicates the specific time for the therapeutic intervention which is of 2 types, *Ritu-Kriyakala* and *Vyadhi-Kriyakala*. The *Ritu Kriyakala* deals with normal physiological variations of the *Doshas* (humours) in the respective seasons. They are subdivided into 3 stages namely, *Sanchaya*, *Prakopa* and *Prasara*. The second type i.e *Vyadhi Kriyakala* deals with the consecutive stages of a disease process. *Vyadhi Kriyakala*, also termed as *Shatkriyakala* consists of six stages which are *Sanchaya*, *Prakopa*, *Prasara*, *Sthana Samshraya*, *Vyaktavastha* and *Bhedavastha*.^[2]

1. *Sanchaya*

The first stage of *Shatkriyakala* is the *Sanchaya*, in which due to *Nidana Sevana* (etiological factors) the aggravated *Doshas* starts getting accumulating on their own sites.^[3] The main responsible cause for this is *Trividha Hetu* i.e *Asaatmya Indriyaartha Samyoga*, *Parinama* and *Pragnaaparadha*.^[4] During this stage the person feels grievance from the *Chaya Karana* (causative factors) and desires for the things with opposite properties to that of aggravated *Dosha*.^[5] Apart from this specific symptoms related to the aggravated *Dosha* are also noted which are explained in the Table 1.

2. *Prakopa*

Prakopa is the second stage of *Shatkriyakala*. During this stage the previously accumulated and stagnated *Doshas* on their respective sites, tends to get circulated to other sites. *Acharya Sushruta* has quoted that the aggravated *Doshas* will be in liquefied form and tends to leave their own site during this stage.^[3]

The general causes mentioned for this stage involves unhealthy lifestyle and the specific causes are related to individual *Dosha Prakopa*. The specific *Dosha* related symptoms during this stage are mentioned in Table 1.

3. *Prasara*

It is the third stage of *Shatkriyakala* during which the migration of the *Doshas* takes place. During this stage the aggravated *Doshas* leaves their original site and starts spreading to other parts of the body.^[6] *Vayu* is said to be the main responsible factor for the movement of

Doshas due to its *Rajo Guna*.^[7] The symptoms according to individual *Doshas* during *Prasaravastha* are explained in Table 1.

4. *Sthana Samshraya*

The fourth stage of *Shatkriyakala* where localization of *Doshas* takes place is *Sthana Samshraya*. Due to continuous indulgence of etiological factors, the vitiated *Doshas* settles down to one place where *Srotovaigunya* is present and *Dosha-Dushya Sammurchana* takes place.^[8] At this point the manifestation of a disease occurs and the *Purvarupa* i.e prodromal symptoms of that particular disease are elicited.^[9]

5. *Vyakta*^[10]

The fifth stage is the *Vyaktavastha* in which all the sign and symptoms of a disease are manifested along with its types.

6. *Bheda*

It is the most advanced and last stage of *Shatkriyakala*. During this stage, due to *Deergha Kalanubandha*^[11] i.e. chronicity of the disease, *Upadrawa* (complication) is seen. If these complications are not addressed during this stage, then the disease will become *Asadhya* (incurable).

Table 1: *Doshika* symptoms in *Sanchaya*, *Prakopa* and *Prasara* stages of *Shatkriyakala*.

<i>Kriyakala</i>	Symptoms
<i>Sanchaya</i>	<i>Vata – Stabdha Poorna Koshtata</i> <i>Pitta – Peetaavabhaasata, Mandoshmata</i> <i>Kapha – Gauravam, Alasyam</i>
<i>Prakopa</i>	<i>Vata – Koshta Toda, Sancharana</i> <i>Pitta – Amlika, Pipasa, Paridaha</i> <i>Kapha – Hridaya Utklesha, Annadwesha</i>
<i>Prasara</i>	<i>Vata – Vayorvimarga gamana, Atopa</i> <i>Pitta – Osha, Chosha, Paridaha, Dhoomayana</i> <i>Kapha – Arochaka, Avipaka, Angasada, Chardi</i>

Samprapti and Shatkriyakala

In general the *Samprapti* (pathogenesis) of any disease can be understood with the help of *Shatkriyakala* (figure 1). The pathogenesis of the diseases of *Annavaha Srotas* like *Amlapitta* and *Grahani* are explained in the figure 2 in accordance with *Shatkriyakala* which helps in evaluating the stage of the disease and planning the treatment.

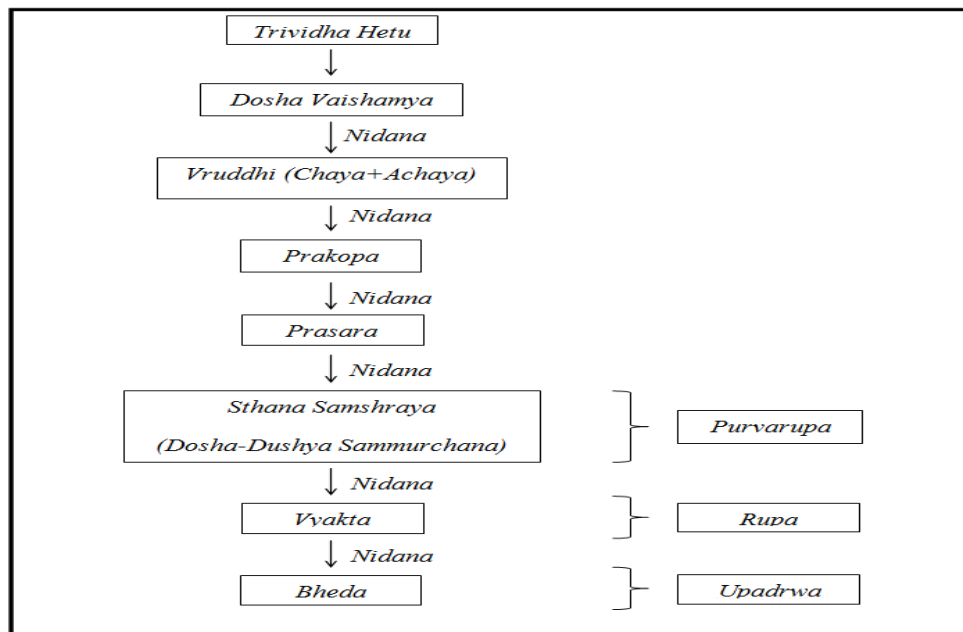


Figure 1: Samprapti according to Shatkriyakala.

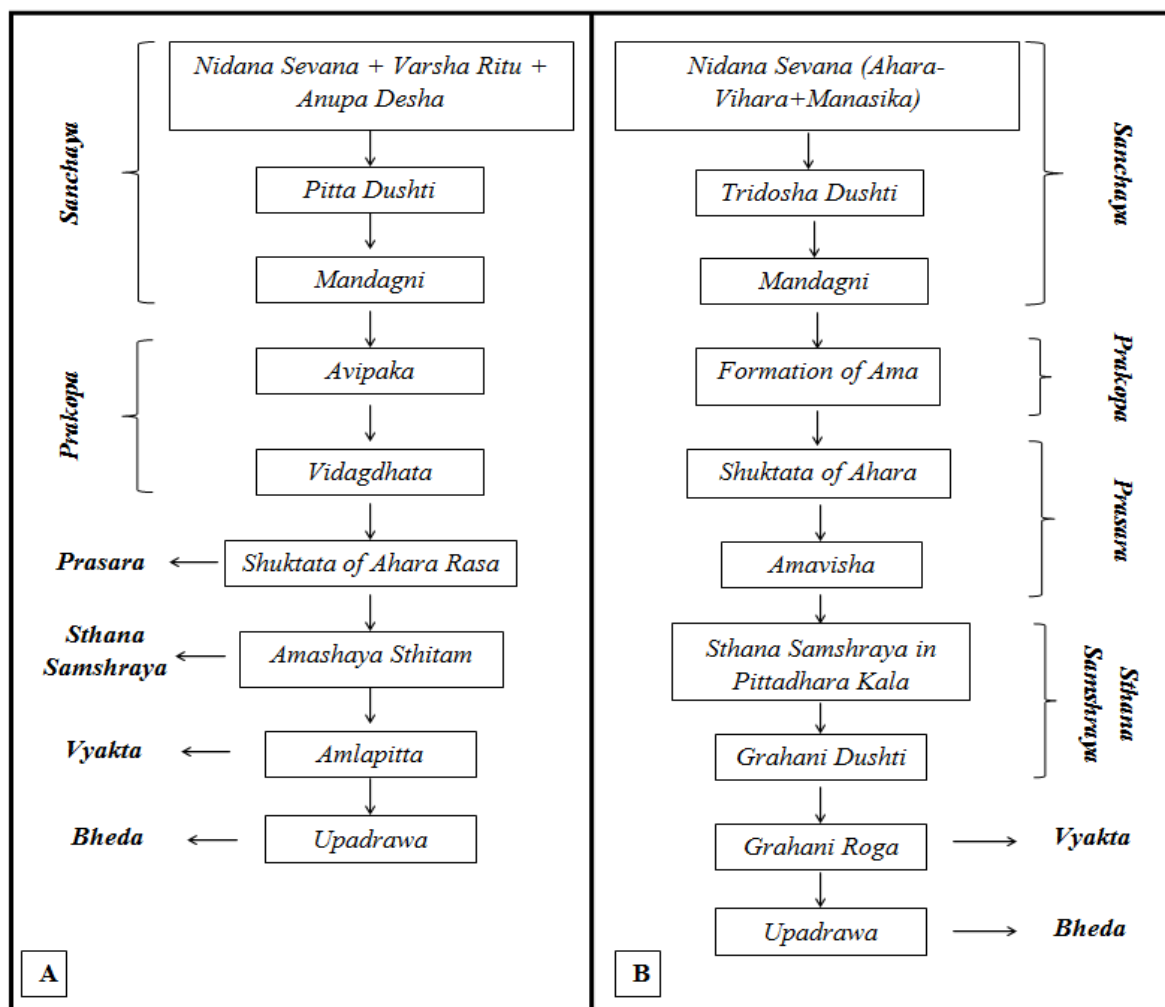


Figure 2: A- Amlapitta Samprapti; B- Grahani Samprapti.

Management with respect to *Shatkriyakala*

The management of a disease is planned in congruence to the different (or particular) stages of *Shatkriyakala*. During the initial three stages i.e. *Sanchaya*, *Prakopa* and *Prasara*, the treatment is planned on the basis of *Dosha* dominance as the disease is not established yet. This is because the *Dosha-Dushya Sammurchana* wouldn't have happened till *Prasaravastha*. As the disease is established during the *Sthana Samshraya* and is depicted with its prodromal symptoms, *Ubhayashrita Chikitsa* i.e implication of both the treatment protocols related to *Dosha* and particular disease has to be employed. During the *Vyakta* and *Bheda* stages, the condition has to be treated according to the mentioned *Chikitsa Sutra* (treatment protocol) of the disease (table 2).

Table 2: Management in different stages of *Shatkriyakala*.

Stage	Management	
<i>Sanchaya</i>	<i>Chaya Karana Vidwesh</i> <i>Nidana Parivarjana</i>	<i>Dosha Pratyanka Chikitsa</i>
<i>Prakopa</i>	<ul style="list-style-type: none"> • <i>Alpa Dosha – Langhana</i> • <i>Madhyama Dosha – Langhana-Pachana</i> • <i>Prabhuta Dosha – Shodhana</i> 	
<i>Prasara</i>	<i>Sthanantara Dosha Chikitsa</i> (treatment according to site of <i>Dosha</i>)	
<i>Sthana Samshraya</i>	Along with the <i>Dosha</i> , treatment of <i>Dushya</i> with respect to its site to be added.	<i>Ubhaya Aashrita Chikitsa</i>
<i>Vyakta</i>	Specific line of treatment of the particular disease	<i>Vyadhi Pratyanka Chikitsa</i>
<i>Bheda</i>	Along with the disease management, complications should be treated	

Annava Srota Vikara

Annava Srotas are considered as one of the major *Srotas* as they helps in transportation and transformation of *Anna* (food), hence nourishing the *Uttarotara Dhatus*. *Acharya Charaka* has mentioned *Amashaya* and *Vamaparshva* as *Moola* (origin) of *Annava Srotas* whereas *Acharya Sushruta* has described *Amashaya* and *Annava Dhamani*. The *Annava Srotas* gets vitiated due to the reasons like *Atimatra Bhojana* (excess eating), *Akala Bhojana* (irregular food timing) and *Ahita Bhojana* (intake of unhealthy food items).^[12] The sign and symptoms seen in *Annava Srota Dushti* are-

- *Annabhilasha, Arochaka, Avipaka and Chardi*^[13]
- *Shoola, Anna Dvesha, Chardi, Pipasa, Andhya and Marana*^[14]

DISCUSSION

In the initial three stages of *Shatkriyala* namely *Sanchya*, *Prakopa* and *Prasara*, diagnosis of a disease cannot be established as *Dosha-Dushya Sammurchana* has not taken place. But the symptoms according to the predominance of the *Doshas* can be elicited in the first three stages. The symptoms which can be commonly seen in *Annavaha Sroto Dushti* mentioned in *Ayurveda* classics and during the clinical practice can be merged together for better understanding the disease stage (table 3). In the further stages of *Shatkriyakala* i.e *Sthana Samshraya*, *Vyakta* and *Bheda*, the disease gets established and the symptoms of *Amlapitta* and *Grahani* can be appreciated during these stages (table 4).

Table 3: Symptoms manifested during *Sanchaya*, *Prakopa* and *Prasara* stages of *Annavaha Sroto Dushti*.

Symptoms	<i>Sanchaya</i>	<i>Prakopa</i>	<i>Prasara</i>
Symptoms according to classics in <i>Annavaha Sroto Dushti</i>	<i>Mandoshmata</i> <i>Gaurava</i> <i>Alasya</i>	<i>Annadwesa</i> <i>Hridaya Utklesha</i> <i>Amlodgara Pipasa</i>	<i>Arochaka</i> <i>Avipaka</i> <i>Chardi Atopa</i>
Common clinical complaints	Bloating of abdomen, heaviness, indigestion, loss of appetite, generalised weakness, excessive burping, sour belching		

Table 4: Symptoms of *Amlapitta* and *Grahani* in *Sthana Samshraya*, *Vyakta* and *Bheda* stages.

<i>Shatkriyakala</i> stage	<i>Amlapitta</i>	<i>Grahani</i>
<i>Sthana Samshraya</i>	<i>Purvarupa</i> are not elicited in this particular disease.	<i>Purvarupa</i> like- <i>Trishna</i> , <i>Alasya</i> , <i>Balakshaya</i> , <i>Vidaho Annasya</i> , <i>Pakashcha Chirata</i> etc will be seen.
<i>Vyakta</i>	Common symptoms like <i>Avipaka</i> , <i>Klama</i> , <i>Utklesha</i> , <i>Tika-Amlodgara</i> , <i>Hrid-Kantha Daha</i> and <i>Aruchi</i> . ^[15] Symptoms according to different types like <i>Urdwaga</i> and <i>Adhoga Amlapitta</i> will be elicited.	“ <i>Pakvam Va Sarujam Pooti Muhurbaddham Muhurdravam</i> ” ^[16] <i>Trishna</i> , <i>Arochaka</i> , <i>Praseka</i> etc can be seen. ^[17] Symptoms of different types of <i>Grahani</i> will also be appreciated.
<i>Bheda</i>	<i>Upadrawa</i> like <i>Jwara</i> , <i>Atisara</i> , <i>Pandu</i> , <i>Shoola</i> , <i>Shotha</i> , <i>Aruchi</i> and <i>Bhrama</i> .	<i>Upadrawa</i> - <i>Jwara</i> , <i>Shotha</i> , <i>Shoola</i> , <i>Hikka</i> , <i>Vamana</i> , <i>Shwasa</i> , <i>Pandu</i> , <i>Pralapa</i> .

Practical approach of *Shatkriyakala*

The practical applicability of detecting the disease stage with the help of symptoms described during each stage of *Shatkriyakala* can be appreciated with the help of following case studies-

Case study 1 – A 36 years old male patient came to our OPD with complaints of sour belching, headache, bloating of abdomen, burning sensation over chest region associated with pain in abdomen, small rashes and heaviness of the body. The present stage of the disease was *Vyaktavastha* and the disease was diagnosed as *Urdhwaga Amlapitta*. The detailed timeline of the disease course and its relation with *Shatkriyakala* is mentioned in table 5. The condition was managed with *Shodhana* procedure followed by *Shamana* line of treatment.

Shodhana (Virechana)

- First 3 days: *Chitrakadi Vati*- 2TID before food with warm water.
- 4th day – 7th day: *Snehapana* with *Sukumara Ghrita* in the increasing dose of 30ml, 60ml, 90ml and 120ml respectively, early morning, empty stomach with hot water.
- 8th day- 11th day: *Sarvanga Abhayanga* with *Ashwagandha Bala Lakshadi Taila* followed by *Bashpa Sweda* for 4 days
- 12th day: *Virechana* with *Trivruth Lehya* 45gms with 100ml of *Triphala Kashaya* as *Anupana*.

Shamana

- Shankha Vati – 2TID (Before food)
- Tab. Gasino – 1TID (After food)
- Tab. Anuloma DS- 1HS (at bed time)

The patient showed good improvement with reduction in the complaints of sour belching, burning sensation over chest region, bloating and pain in abdomen.

Table 5: Disease course of *Amlapitta* with *Shatkriyakala* (case study 1).

Clinical symptoms	Duration	Probable <i>Kriyakala</i>
Loss of appetite (used to skip dinner) Indigestion Bloating of abdomen Sour belching (on/off)	April 2019	<i>Sanchaya</i> <i>Prakopa</i> <i>Prasara</i>
Continuation of etiological factors		
Along with above symptoms he developed mild headache and burning sensation over chest region & abdomen (on/off)	February 2020	<i>Sthana Samsharaya</i>
Continuation of etiological factors		
Increased frequency and severity of sour belching, headache, bloating of abdomen, burning sensation over chest region associated with pain in abdomen, small rashes and heaviness of the body	September 2020	<i>Vyaktavastha</i> Diagnosis- <i>Urdwaga Amlapitta</i>

Case study 2 – A 65 years old female patient complaining about frequent loose stools (7-8 times/day; 2-3 times in a month) associated with bloating and pain in abdomen, loss of appetite, nausea, headache and weakness came to our OPD. The disease course in relation with *Shatkriyakala* is described in the table 6. The current state of the disease was *Vyaktavastha* and the case was diagnosed as *Vataja Grahani*. *Kala Basti* was planned with *Takra Basti* as *Niruha* and *Anuvasana* with *Changeriyadi Ghrita*. The oral medications given were-

- Chaturbhadra Kwatha – 25ml BD (Before food) with warm water
- Tab. Eladi vati- 2 BD (Before food)
- Tab. Brahmi vati- 1BD (After food)
- Tab. Nodys- 2 SOS

Patient showed improvement with reduction in the symptoms like- frequency of loose stools, bloating and pain in abdomen, nausea and headache.

Table 6: Disease course of *Grahani* with *Shatkriyakala* (case study 2).

Clinical symptoms	Duration	Probable <i>Kriyakala</i>
Loss of appetite Generalised weakness Heaviness of the body	January 2019	<i>Sanchaya</i> <i>Prakopa</i> <i>Prasara</i>
Continuation of etiological factors		
Along with above complaints, indigestion and bloating of abdomen	October 2019	<i>Sthana Samshraya</i>
Continuation of etiological factors		
Frequent loose stools (7-8 times/day- 2-3 times in a month) associated with – bloating and pain in abdomen, loss of appetite, nausea, headache and weakness	December 2019	<i>Vyakta</i> Diagnosis- <i>Vataja Grahani</i>

From the above two case studies, the practical approach of *Shatkriyakala* with respect to the disease can be appreciated. Implying the clinical aspect of *Shatkriyakala* in accordance with the particular stage of a disease helps in-

- Establishing the early diagnosis by the symptoms elicited in each stages.
- Planning the management in accordance with disease stage.
- Thereby improving the prognosis

CONCLUSION

Early diagnosis and early intervention is the sole message of the *Shatkriyakala* concept. In the diseases of *Annavaha Srotas* like *Amlapitta* and *Grahani*, the role of *Shatkriyakala* is appreciated in detecting the particular disease stage with the help of its symptoms. If the treatment of a disease is not initiated at appropriate time (early or late) it may result in bad prognosis even that of curable diseases. Hence, the practical approach of *Shatkriyakala* plays an important role not only in diagnosing but also in managing any disease.

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