Samprapti vivechan of Grudhrasi

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According to Acharya Charaka definition of samprapti is,
Vyadhi upalabdhee kaaraneshvakam tatha tatsvaroopam iti sampraapti |¹
i.e. Madhavacharya defines the term sapraapti as follows.
Rogasya smyak praapthi iti sampraapti |²
Samprapti means the total or complete establishment of a disease in the body. It is also known as Jati, Agati.
Doshas are vitiated by specific nidan. That vitiated doshas travels all over the body. At that time, if srotoavaroda occurs, Dosha-dushya sammurcchana takes place and then only the symptomatology of that disease is established. This entire process of establishment is known as samprapti.³
In our classics, individual samprapti of Grudhrasi is not mentioned, even though an attempt has been made to describe the pathogenesis of Grudhrasi vata vyadhi on the basis of general samprapti of vata-vyadhi.
The nidanas of vata vyadhi can be differentiated into two groups according Dosha Prakopa and Strotovaigunya karaka hetu.

Table No:1

<table>
<thead>
<tr>
<th>DOSHAPRAKOPAK HETU</th>
<th>STROTO VAIGUNYAKARAK HETU</th>
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</thead>
<tbody>
<tr>
<td>Ativyayam, balavara-vigraha, ativyyaya, prapidana, pradhavan, abhighata, langhan, plavan, ashwa-usthra prapatan. Katu tikta kashaya rasa seven, laghu ruksha, sheeta, gunatmak, padartha seven, shushka shaka atiprayog, anashana, vishamashana, vegadharan, atidhatukshaya, atirakta kshaya. Atipurushakshaya, vishamopachar, doshatistra-avant, shoka chintadi Manasik hetudukkha shayya tatha asan seven. Divaswap, marmaghata, adhwagaman, rogamakshana, amakruta ahar, vihar, vicheshta, etc.</td>
<td>Ativyayam, ativyyayav, abhighata atidhatukshaya, kathor shayya, Asan seven, atirakta kshay, ama, langhan, vishamashana, marmaghata, rogamakshana, prapidan, vicheshta, atipurusha kshaya, doshatistran, vegavarodha, adhwagman, bhagna, ratha yanaticharya.</td>
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SAMPRAPTI GHATAKAS IN GRUDHRASI
The knowledge of this is necessary to study the exact pathogenesis.

DOSHA:
- Vata
  - Vyan vayu.
  - Apana vayu.

Similar to any other Naanaatmaja type of vaata vyadhi, definite involvement of vaata Dosha in the pathogenesis of Grudhrasi. It is also well known that the Vataprakop may occur in two ways viz. due to Dhaatukshaya and Maargaavarodha. In the first instance, Rooksha, laghu Sheeta, Pramitaashana, Vyaayaama, Abhighaata etc, Nidana seven leads to direct Vataprakop.

In the case of Maargaavarodha, accumulation of Kapha Dosha plays an important role, particularly in producing Vaatakaphaja type of Grudhrasi. In rare case Grudhrasi, there may be buring sensation along with pain, which indicates even the involvement of the pitha Dosha.

As described in Sushruta Samhita, Sakthanam Kshepam Nigraharneeyat is one of the cardinal symptoms to be found in Grudhrasi patients. This Kshepana and Utkshepana etc. activities are being attributed to Vyaana Vaayu. The impairment of these function occur in Grudhrasi due to variation of Vyanavata, (ast.sang sut 20/4) By this observation it is evident that out of five types of Vata, morbid Vyana Vayu is the primary cause of the illness.

The role of other Vata cannot be ruled out, all these types of Vata are mostly interrelated in their physiological functioning. The Apana vata having its site as Kati and Sakthi, which is diseased in Grudhrasi. Though praana situated in Moordha its functions extended to whole body including lower extremities. As Grudhrasi is disease which hampers the movement and Sakthi Utshepa Grahana, even Udaana Vaayu may involve in the pathogenesis as it is initiator for any work and Prayatna, Oorja and Bala are its attributes.

Kapha
Sleshaka Kapha invariably gets involved in pathogenesis as it resides in Sandhi. It is material which is present in between the joint to maintain their grip and allow them to move freely. The function of intervertebral disc are exactly the same as attributed to Sleshak kapha, Sleshak kapha protect the sandhi during friction due to its pichila guna. Suppose kapha vrudhi occurs in and around joint lead to accumulation of medas and daurabalya of muscle. The muscle weakness result in decreased resistance of joint to strain and stress which again result in dislocation or rupture.

In Vaatakaphaja Grudhrasi, Arochaka and Bhaktadvesha are the distinguishing features and are due to vitiation of Bhodhaka Kapha. Even kledaka kapha may indirectly involve in the pathogenesis, more particularly in isolated cases of Grudhrasi Predominated by the imbalance of Kapha Dosha in association with Vata. So Vata and its association with Kapha are considered as the Doshas involved in Grudhrasi.

DUSHYA:
Charak acharya, defines that dushya are those body-elements, which vitiated by Vikruta, doshas.
Yadyaashairdushtam bhavanti rasaadikam maladikam cha tat | 4
According to Madhav-nidan
Doshadushyasamuccchanajaanito vyadhihi || 5
i.e. For the manifestation of any disease: there is necessity of samurcchana of Dosha and Dushya (i.e. dhatu /strotas/Upadhatus / mala’s)

On going through samprapti we find that this vata vitiated in adhoshakha i.e. spik, kati, prushthabhag and adhoshaka.

In our classic specific dushyas (i.e. dhatu and upadhatu) of Grudhrasi are not given, then also an attempt has been made to describe the dushya factors of Grudhrasi on the basis of Dhatugata vata:, Avayavagata vata and Avrutta vataj lakshana.

The Rakta dhatu and its strotas
Mamsa dhatu and its strotas
Medodhatu and its strotas
Asthidhatu and its strotas
Majjadhatu and its strotas

And the upadhatus like sira: kandara: & snayu can be considered as dushya.

Mamsa; Asthi; and Majja dhatu are pradhan dushyas while the involvement of Rakta; and Medo-dhatu is seen less prominent.

Pain at Katik: Trik: Uru: Janu: Jangha & Pad: this lakshanas of Grudhrasi can find in Gudagata-Vata & Guda is one of the mamsamarma. The specific lakshanas like the pipilika iva sanchar (i.e. tingling numbness) is a lakshana of mamsavrutta vata is seen in initial stage of Grudhrasi vata vyadhi.

The mamsa medogat vata lakshanas like Ruk, Todavat vedana Angagaurav can find in this disease.

The whole mamsadhara kala is considered along with sira: snayu: and dharmani which are embedded in it.

The rakta-dhara kala is in close relation to “Mamsadhara” The involvement of Rakta-dhatu and its upadhatu like Sira and Kandara can be explained with the help of Raktagata vataj lakshana and Raktavrutta vataj-lakshanan.

According to Charakacharya Sirvedha between Gulpha and neighbouring Kandara is one of the management of Grudhrasi vata vyadhi that means there is an important role of Rukta dhatu in the manifestation of Grudhrasi.

According to Sushruta and Vagbhata Snayu and Kandara are dushya in this disease, which are upadhatus of Rakta and Meda-dhatu. Pratanavati Snayu: Sushrita Snayu: Vrutta Snayu these can be considered as different aspects of mamsa dhatu; because according to Dalhan. Uatkshepanaa apkshepanaakriyaash cha shaktir iti| i.e. bodily movements are carried out by Vyana vayu with the help of mamsa dhatu.

The todavata-vedana, Ruja, (a lakshana found in mamsa-medogata vata) and Aruchi (a lakshana found in meda-avrutta vata) is seen in Grudhrasi Vata Vyadhi.

Regarding the ashrayashrayi sambandha of Asthi dhatu and Vata dosha, we cannot neglect the role of Asthi with majja dhatu in the manifestation of disease.

Todavata-vedana and Deha-pravakrata is a lakshan of Grudhrasi can find in Asthi and Majja avrutta vata dosha. Santata ruk; Sandhishoola; mamsabala kshaya; these lakshanas are found in Asthi majjagata vata.

The vital points of our body are considered as marmas, the injuries of these marmas, cripple the local function and even lead to sudden death of individual, Katikataruna, Kukundar, Nitamba Maramas are the usually focus of the affliction. Adhakaya –chesta hani; Adha-Kaya shosha; stambha; in Kati: Sphik; Prushtha: Uru Pradesha: Khanjata: Ruja; Stabdha-Padata; Panguta; Kampa during pada-bhramana these lakshanas; Which are looks like lakshanas of Grudhrasi vata-vyadhi are because of aghatajanya vikruti of Kukundar; Nitamba; Ani; Janu; Indrabasti’ Gulpha; Kurchshire and Talahrudaya marmas respectively. (Table No. 3 of Nidana- Vivechana)

With the above explanation it can be concluded that due to nidan sevan on one side especially in Kati; Trik; Prushthabhag and adhoshakhashrita dhatu; upadhatu and marmas; sthanvaigunya takes place while on the other side Vata-prakopa takes place. Here due to increased Ruksa; Laghu; Gunas of vata the sandhisamshleshana, Snehan, ropan, dhatupurna, balakar karmas of kapha dosha gets decreased.

**STROTODUSHTI PRAKARA :-**

There are four types of strotodusthi. Among them sanga is possible to considered as strotodusthi type. Because here the function of sthnik vata is hampered, this is noted by the vikruta lakshanas. But the nature of sanga is very difficult to attribute.

**AGNI:-**

Jatharagnimandya and Dhatwagnimandya is seen. Due to nidan sevan. There is vitiation of Vata and kapha in koshta. It vitiates agni leading to agnimandya. Because of kapha or Ama, Praseka,
Agninandya, Arochak, Tandra, Gaurava, Alasya, these lakshanas can be seen in Grudhrasi.\(^{17}\)

**UDHVAVASTHANA:**

Pakwashaya is the place for Katu-avasthapak, where under the influence of Shoshaman vanhi, the food is turned into katurasatmak paripindit mala, which maintains the structural as well as functional integrity of vata so it is an important sthana of Vata.\(^{18}\)

**Sarvada sarvabhaavanaam saamaanyam . . . . . .**

Niranatara vataprakopaka nidan sevan results in various vata vyadhi. Again pakvashaya is situated in shroni.\(^{18}\)

**Vaataha shroni gudasamshrayaha tadupari adhonaabhe pakvaashayaha** | \(^{19}\)

Trik is one of the panchasthi in forming shroni. Avalambak kapha is seated along with Trikasthi and helps in avalamban of Trik, Prusthabhaga and Adhoshakha. When actually vataprakopa takes place in its own sthana it first affects the avalambak kapha and hampers its normal function and vyadhi gets originated with Katigraha lakshana.

**SANCHARA STHANA :-**

Vata vahi sira present in Abhoshakha, Adhogami vatavahi Dhamani

Sphik, kati, prushta, Uru, Janu, Jangha and Pad is sanchar Sthana of Grudhrasi Vyadhi.

Distribution of Symtoms, like radiating pain from low back up to the posterior accept of thigh, calf and heal indicates the lower half of the body as the Sanchara Sthana of the Dosha. In addition to this the typical symptoms of Vatakaphaja Grudhrasi like, Aruchi, Gaurava and Tandra point towards the ubiquitous distribution of vitiated Dosha.

**ADHISTHANA:-**

Sphik, Kati Prushtha and Abhoshakha

Pain originating from the Kati Prushtha region radiating to Janu Jangha and Pada is the cardinal symptoms of the disease. Vitiated Vyana Vayu getting localized in these areas produces the symptoms. Needless to say these sites of pain is the Adhishthana of the disease. Sphik, Kati Oru...
SCHEMATIC REPRESENTATION OF GRUDHRAKI

SAMPRAPTI

DIAGRAM - I

Nidansevan
Ruksha;laghu sheetadi
Atisevan

Vatadosha Udirana
In Koshta

Stabdhapoorna Koshtaha
Chaya

Hetusetatya

Koshtathoda Sancharanam
Prakopa

Vayuvimargaman Prasara

Nidansevan as
Rogatikarshana
Dhatukshaya
Ati Asrik Kshaya
Atimamsa kshaya

Atirathacharya

Abhighata
prapidan
Prapatan
Ativayam

Sthanasaigunyam

Sthanasaigunyam

Sthanasamshraya

Grudhrasi Lakshanam
Vyakti

Vatav Grudhrasi (Bheda.)
SCHEMATIC REPRESENTATION OF GRUDHRASI SAMPRAPTI

DIAGRAM – II

Nidansevan as
Atisevan of Katu
Tikta Kashaya rasa
Alpabhojan, Langhan
Anashan

Nidansevan as
Manasik-hetu
Chinta, Shok
Bhaya, Tras

Nidansevan as
Balavata Vignaha
Bharavahana
Prejagaran
Dukkha Shayya
Dukkha asan

Vatadosha Udirana
Stabdha Poorna Kostha
Chaya

Vataptakopa
Sthanavaigunya in
Kati; Prushtha
Adhoshakha

Hetusatatyat
Koshtha toda Sancharanam
Prakopa
Prasara

Sthanasaumshray

Grudhrasi Lakshanases (Vyakti)
Vataj Grudhrasi (Bheda)
**SCHEMATIC REPRESENTATION OF GRUDHRASI SMPRAPTI**

**DIAGRAM – III**

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<tr>
<th>Nidansevan as</th>
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<tbody>
<tr>
<td>Vataprapakopak</td>
<td>Ahar, Vihar</td>
<td>Aghatadi hetu</td>
</tr>
<tr>
<td>Ahara, Vihar</td>
<td>As diwaswap</td>
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<td></td>
<td>Amakarak as</td>
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<tr>
<td></td>
<td>Viruddha ahar</td>
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<tr>
<td>Chaya</td>
<td>Vihar Sevan</td>
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<td>Prakopa</td>
<td>Chaya</td>
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<tr>
<td>Prasaran</td>
<td>Gaurav Alasya</td>
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<td></td>
<td>Margavarodhajanya</td>
<td>Vataprapakopak</td>
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<td>Hetustatya</td>
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<td>Prakopa</td>
<td>Prakopa</td>
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<td>Anhadwesha</td>
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<td>Prasara</td>
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<td></td>
<td>Arochak Avipska</td>
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<td></td>
<td>Agnisad</td>
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<td></td>
<td>Sthanasamshiraya</td>
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<tr>
<td>Grudhrasi Lakshanasa (Vyakthi)</td>
<td>Vatakaphaj (Bheda)</td>
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- **Samprapti:**

Samprapti of Grudhrasi roga can be explained in following manner.

As shown in Diagram I due to nidansevan. Especially vata dosha udiran takes place in koshtha. While on other side strovaigunya or sthanavaigunya is manifested. Kostagata udiran
vata develops symptoms like stabdhapoorna-koshthata. This can be considered as chayavastha of Grudhrasi. Further on continuation of nidansevan, the chayavastha turns into prakopavashta and develops symptom like koshtha-toda sancharanam. If this avastha is neglected the disease attains prakopavastha. This vitiated vata spared all over the body through rasayanies and it lodges (sthan samshraya) in kati, prushtha and adhoshakha. Here starts Dosh dushya samurchana because of Dosha-dushhya sammurachana the lakshanas of Grudhrasi.

Further on continuation of nidansevan, the chayavastha turns into prakopavashta and develops symptom like koshtha-toda sancharanam. If this avastha is neglected the disease attains prasaravastha. Thus the samprapti of Grudhrasi roga can be summarized as follows.

On going through aetiological factors, it can be noted that the nidanas affects the body in two ways. Because of Aharaj hetu vitiation of Vata and kapha dosha takes place in “Udbhavastha”. This vitiated dosha circulates throughout the body through rasayanies. On the other hand, due to nidanas aforesaid as Aghata, Balavata-vigraha, bhavahan, dukkha-shayya, Dukkha- asan, “Khavaigunya” or “Strotovaigunya” takes place in kati, prushtha and abhoshakha.

So the vitiated vata dosha which is pervading throughout the body, during it’s course when comes to “Khavaigunya”, it gets lodged, which can be considered as Sthanasamshraya.

The Diagram – III gives an idea about the pathophysiology of Vata-Kaphaja Grudhrasi. Here because of Vata-Prakopak ahar-vihar, vata prakopa takes place, as well as Diwanswap; Viruddha arhara-vihar sevan or Ama-karak hetu causes prakopa of kapha dosha. The prakopita kapha dosha passing through chayadi-avastha and gets lodged in Kati and adhoshakha, where already sthanavaigunya has been appeared because of Vegaavarodha, Prajagaran, Dukkh shaya or Asan.

The cardinal features of Grudhrasi roga is the pain starting from spikh kati and extends downward in the posterior part of limb till parshni or pad.

### SAMPRAMPTI AVSTHA OF GRUDHRASI:

Every Vyadhi is said to pass through five stages before it’s establishment in the body. Viz chaya; prakoipa; prasara; sthanasamshraya; vyakthi and bheda.

The concept of Kriya-kala explains the mode and stage of manifestation of a disease. The series of changes occurring in the manifestation of a disease is “Shat Kriyakala”.

The concept of Kriya-kala means the time of action. Kala or time in this context signifies the avastha or stages of process of a disease. The concept of Kriyakala describes the mode and stages of the development of disease. A good understanding of this is very essential for early diagnosis, prognosis and for adopting preventive measures.

The de-arranged doshas checked or subdued in their chayavashta, may not be able to proceed with
subsequent evaluative changes. If left unaddressed they may gain strength and intensity in the course of their further development.

- **CHAYA:** 20 Su.Su. 21 /18
Chaya means increase of accumulation or stagnation of the doshas in their original place. This stage is characterized by vague symptomatology such as the dislike for or aversion to factors responsible for increase of doshas and desire for factors or substances possessing qualities opposite to doshas involved.

In Grudhrasi due to nidan sevan there is chaya of vata and kapha dosha in Koshta is seen. Which is characterized by stabdhapoornakosthata or Anga-gauaravadi lakshanas.

- **PRAKOPA:** 21 Su.Su. 21 /27
It is stated to be the condition in which the dosha having increased or accumulated in its own place being excited by appropriate courses spreads over to those parts other than that of its own. In grudhrasi Koshta toda sancharanam may be considered as prakopavastha.

- **PRASARA:** 22 Su.Su 21/ 32
The term prasara means to spread. According to sushruta, prakopita doshas expand and overflow the limits of their in respective location. In Grudhrasi vayurvimagamagama, these lakshanas can be considered in prasaravastha while along with this arochak, avipaka, angasad is seen in manifestation of vata-kaphaja Grudhrasi.

- **STHANASAMSHRYA (i.e. POORYA RUPAS OF GRUDHRASI.)**
This stage obviously represents the predormal phase or the phase of poorvarupas of the disease, yet to manifest fully.

The poorva-rupas may be samanya or vishishtha. In vata-vyadi the Acharyas have not mentioned any specific i.e. vishishtha poorva rupas, but there is occurrence of lakshanas of disease with less severity.

The poorva-rupas of Grudhtasi are not mentioned in the classics, so it can be considered that the lakshanas of Grudhrasi with less severity, as poorvarupas.

In practice also it is not that much easy to come across the poorva rupas of Grudhrasi, because in this avastha, patient may not be coming to vaidyas. They are managing themselves by Appling balms; medicated oils available in the market. After repeated nidansevan when patient cannot bear the severity of pain, they approach to doctors, after suffering for months or years together. After history taking, it is understood that Granthithah, Sashoola Malapravrutti: Angamarda, Occasional katishoola - while bendihng or exposure to strain, Alpanidra are the possible poorva rupas of Grudhrasi roga.

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22. Su.Su. 21 /32