

Research Article

A Retrospective Observational Study to Assess the Role of Aharaja and Viharaja Nidana in the Causation of Gridhrasi

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ABSTRACT:

Gridhrasi is one among the *Nanatmaja Vata Vyadhi*¹, which presents with low back pain radiating down to lower limbs. Low Back Ache is the most commonly seen health issue requiring medical intervention in the society as suffering persons are unable to perform their daily routine activities easily. According to WHO, Feb-2021, approximately 1.71 billion people have musculoskeletal conditions worldwide. Among musculoskeletal disorders, Low back pain causes the highest burden with a prevalence of 568 million people. Musculoskeletal conditions are the leading contributor to disability worldwide, with Low back pain being the single leading cause of disability in 160 countries². The condition of Low back ache affects 1% to 10% of the population, ranging from mild to severe, and most common in adults between the ages of 25 to 45 and it is uncommon before the age of 20 years and affecting male and female equally³. *Nidana of Gridhrasi* is not elucidated independently, so the general *Vata Vyadhi Nidana* is considered as the *Nidana for Gridhrasi*. As the saying goes '*Sankshapatana Kriyayogo Nidanaparivarjanam*'⁴, an evaluation of the causative factors is very essential to create awareness among people and further helping in prevention and treatment of *Gridhrasi*. The keen observational study of *nidana* in subjects of *Gridhrasi*, it will help to obtain proper understanding about the *tara-tama bheda* of *dosha* and *vyadhi Avastha* for management. Hence, here an attempt is made to assess *Aharaja* and *Viharaja Nidana* in *Gridhrasi*.

Keywords: *Gridhrasi, Vata Vyadhi, Sankshapatana Kriyayogo Nidanaparivarjanam, tara-tama*

OBJECTIVES

- To prepare and validate a Questionnaire to assess *Nidana for Gridhrasi*.
- To assess the *Aharaja* and *Viharaja Nidana* in *Gridhrasi*.

MATERIALS AND METHOD

Study design:

- It was a Retrospective observational Study.
- Detailed case Pro-forma was prepared considering the cardinal features for assessment.
- A questionnaire was prepared and validated from the subject experts and utilized.
- Subjects were interviewed to assess the *aharaja* and *viharaja nidana* by using predesigned, validated questionnaire.
- 200 subjects fulfilling the inclusion criteria were selected from OPD and IPD of JSS Ayurveda Medical College and Hospital, Mysuru and other referrals including medical camps and they were subjected to interrogation to assess various *aharaja* and *viharaja nidana* they indulged in.

OBSERVATION

It was an observational study with 200 as sample size. The details of vital data pertaining to these subjects are being described in detail under each heading. Frequencies and percentages calculated for categorical variables were determined. Bar charts were used for visual representation of the analysed data.

DEMOGRAPHIC DATA

Age:

The age-wise distribution of 200 subjects.. The highest proportion of subjects were (54.5%, n = 109) aged 31-50 years, followed by (38.5%, n = 77) 51-60 years of age, while the smallest proportions (7.0%, n = 14) of subjects aged 25-30 years.

Gender:

The data revealed that the majority were (51.0%, n = 102) male subjects and (49.0%, n = 98), are female subjects indicating a nearly equal representation of genders in the study.

Marital status:

The majority of the subjects were married, comprising 84.0% of the sample (n = 168). Unmarried individuals were 10.5% (n = 21), while 5.5% (n = 11) of the subjects were widowed.

CHIEF & ASSOCIATED COMPLAINTS

Ruk:

A significant portion of the subjects experienced *Ruk* in the right leg with 35.5% of the sample (n = 71). *Ruk* in both legs was reported by 34.5% of the subjects (n = 69), while 30.0% (n = 60) reported *Ruk* in the left leg.

Sthamba:

Most of the subjects were experiencing *Sthamba* in the right leg with 35.5% of the sample (n = 71). *Sthamba* in both legs was reported by 34.5% of the subjects (n = 69), while 30.0% (n = 60) reported *Sthamba* in the left leg.

Tandra:

The majority of the subjects with 95.5% (n = 191) did not experience *Tandra*, while 4.5% (n = 9) reported experiencing it.

Gourava:

The majority of the subjects with 65.0% (n = 130) did not experience *Gourava*, while 35.0% (n = 70) reported experiencing it.

Arochaka:

The majority of the subjects 98.5% (n = 197) did not experience *Arochaka*, while 1.5% (n = 3) reported experiencing it.

Diagnosis:

The majority of subjects were diagnosed with *Vataja Gridhrasi*, accounting for 65.0% of the sample (n = 130). The remaining 35.0% of subjects (n = 70) were diagnosed with *Vata Kaphaja Gridhrasi*.

FOOD HABITS

Type of Ahara:

The majority of subjects practiced a mixed diet comprising 68.0% of the sample (n = 136), while, 32.0% of subjects (n = 64) adhered to a vegetarian diet.

SLEEP

Nature of Night Sleep:

The majority 63.0%(n = 126) of the subjects reported with disturbed night sleep and 37.0% of subjects (n = 74) had sound night sleep.

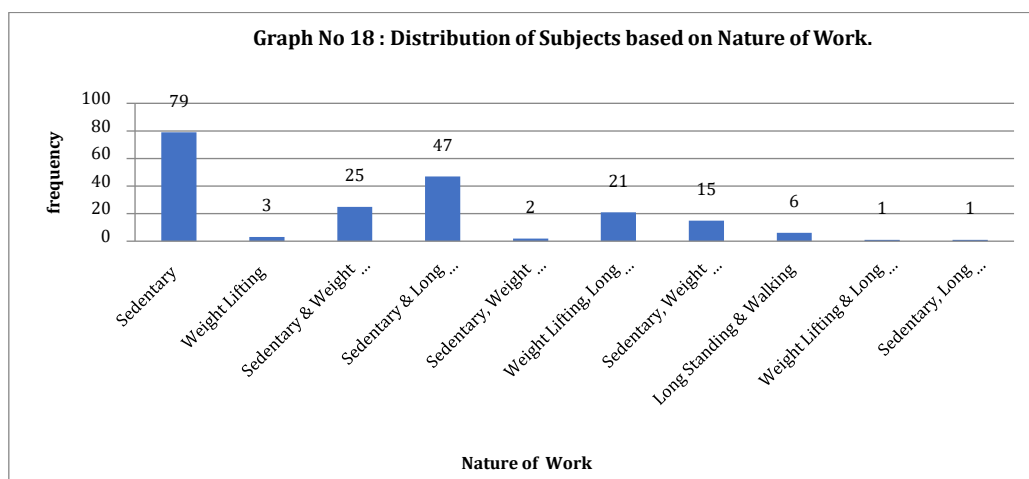
Occupational History

Type of Employment:

The largest proportion of the subjects were employed in fixed-time positions accounting for 37.5% of the sample (n = 75). Self-employed individuals represented 32.0% of the sample (n = 64) and unemployed individuals represented 28.0% of the sample (n = 56). A smaller proportion 2.5% (n = 5) were employed in part-time.

Nature of Work:

The majority of subjects 39.5% (n = 79) were involved in sedentary work. Among those with multiple work characteristics 23.5% (n = 47) engaged in both sedentary and long-standing tasks. subjects involved in both sedentary and weight lifting activities represented 12.5% of the sample (n = 25). Smaller proportions of the sample working in a combination of weight lifting, long-standing and walking (10.5%, n = 21) and those performing sedentary, weight lifting, long-standing, and walking tasks (1.0%, n = 2). Other combinations of work patterns were reported by even smaller percentages of the sample with 1.5% (n = 3) engaged in weight lifting alone and 0.5% (n = 1) each reporting weight lifting with long-standing and sedentary with long-standing and walking



DURATION OF WORK:

The most common work duration was >7 hours, reported by 67.5% of subjects (n = 135) and by 32.0% (n = 64) working between 5-7 hours and 0.5% (n = 1) working <5 hours.

NIDANA

Aharaja Nidana

Ati Katu Ahara Sevana

For frequency of occurrence of *Ati katu ahara*, 47.0% subjects reported daily (n = 94). Regarding the duration, the largest proportion 66.5% of subjects had a duration of more than 10 years (n = 133).

Ati Tikta Ahara Sevana

For the frequency of occurrence of *Ati Tikta Ahara*, 50.5% of subjects reported it monthly (n = 101). Regarding the duration, the majority of subjects had been consuming for more than 10 years (67.0%, n = 134).

Ati Kashaya Ahara Sevana

For the frequency of occurrence of *Ati kashaya Ahara*, 39.5% of the subjects reported monthly (n = 79). Regarding the duration of consumption 69.5% of the subjects had been consuming it for more than 10 years (n = 139).

Ati Laghu Ahara Sevana

For the frequency of occurrence of *Ati Laghu Ahara Sevana* 33.0% subjects reported with daily consumption (n = 66). Regarding the duration of consumption, 76.0% had been consuming it for more than 10 years (n = 152).

Ati Sheeta Ahara Sevana

For frequency of consumption *Ati Sheeta Ahara Sevana* 41.5% of the subjects reported monthly consumption (n = 83). Regarding the duration, the majority of subjects had been consuming *Ati Sheeta Ahara* for more than 10 years (62.0%, n = 124).

Ati Guru Ahara Sevana

For frequency of consumption of *Ati Guru Ahara Sevana* 35.0% (n = 70) of subjects practiced it daily. Regarding the duration of the practice, 67.0% (n = 134) of subjects have been practicing for more than 10 years.

Viruddhaahara

For frequency of consumption of *Viruddhaahara Ahara Sevana* 37.5% (n = 65) and 37.5% (n = 65) practiced weekly. Regarding the duration of the practice 62.0% (n = 124) had a practice of more than 10 years.

Ati Ruksha Ahara Sevana

For frequency of consumption of *Ati Ruksha Ahara* 31.0% reported with weekly

consumption (n = 62). Regarding the duration of consumption, 65.0% reported for more than 10 years (n = 130).

Shuska Vallura Ahara Sevana

For frequency of consumption of *Shuska Vallura Ahara* 42.5% reported with monthly consumption (n = 85). Regarding the duration, 57% had been consuming it for more than 10 years (n = 114).

Mudga Sevana

For frequency of consumption of *Mudga Sevana* 50.5% reported with monthly consumption (n = 101). In terms of duration, most of the subjects had been consuming *Mudga* for more than 10 years (83.5%, n = 167).

Adaki Sevana

For frequency of consumption of *Adaki Sevana*, 63.0% of the subjects reported with weekly (n = 126). Regarding the duration, 83.5% had been consuming *Adaki* for more than 10 years (n = 167).

Chanaka Sevana

The majority of subjects reported with 48.5% weekly consumption (n = 97), Regarding the duration of consumption, 84.0% had been consuming for more than 10 years (n = 168).

Vishamashana

The distribution of responses for *Vishamashana* reveals that 34.0% (n = 68) of subjects practicing this daily. Regarding the duration of this practice, 67.0% (n = 134) reported practicing for more than 10 years.

Viharaja Nidana

Ativyayama

The distribution on *Ativyayama* reveals that, while 25.0% (n = 50) practiced it weekly. Regarding the duration, 27.0% (n = 52) reported engaging for more than 10 years.

Ativyavaya

The distribution on *Ativyavaya*, a significant portion 41.0% (n = 82) engaged in weekly. In terms of duration, 55.5% (n = 113) of subjects reported practicing for more than 10 years.

Ucchabhashya

The distribution on *Ucchabhashya* indicates that 22.0% (n = 44) of subjects never engaged, Regarding the duration, 54.0% (n = 108) of respondents reported engaging in *Ucchabhashya* for more than 10 years.

Atiyana

The distribution on *Yana* shows that none of the subjects reported with never engaging in it, while 40.0% (n = 80) practicing it daily. Regarding the duration, 64.5% (n = 129) of respondents reported engaging in *Yana* for more than 10 years. The distribution of

responses for the type of road used during *Yaana* shows that 44.5% (n = 89) of subjects travelled on improper roads, while 21.5% (n = 43) travelled on proper roads.

The distribution of travel distance per day reveals varied patterns among respondents. A majority 43.0% (n = 86) travel more than 80 kilometres daily. Following this, 26.5% (n = 53) travel between 50 - 80 kilometres each day. The distance travelled between 20 and 50 kilometres is reported by 25.5% (n = 51) of respondents. A smaller segment, 5.0% (n = 10), covers less than 20 kilometres per day.

Atiadhwa

The distribution on *Atiadhwa* reveals a range of practices among subjects. A significant proportion 30.5% (n = 61) reported engaging weekly, Regarding the duration of practice, 44.0% (n = 88) have engaged in *Atiadhwa* for more than 10 years. The distribution of responses regarding the duration of walking per day shows that the majority of subjects 53.5% (n = 107) walk more than 8 kilometres daily.

Dukhashayya

The responses to *Dukhashayya*, 75.0% (n = 150) of subjects experience it daily, Regarding the duration, 37.0% (n = 74) have practiced *Dukhashayya* for more than 10 years. The sleeping habits of the subjects reveals, a significant portion 38.5% (n = 77) reported sleeping on a soft bed. The sleeping postures of subjects are distributed across three primary positions. The most common posture is prone, with 49.0% (n = 98). Lateral posture was reported by 29.0% (n = 58) of subjects. Supine posture with 22.0% (n = 44).

Dukhaasana

The majority of subjects 57.0% (n = 114) reported practicing it daily, Regarding the duration, 54.0% (n = 108) of respondents have been practicing *Dukhaasana* for over 10 years. Regarding the duration of *Dukhaasana*, 36.5% (n = 73) of subjects reported engaging in this activity for >7 Hours per session.

Bharavahana

The distribution of responses shows 46.5% (n = 93) of subjects engaging in this activity daily. Regarding the duration of *Ratrijagarana*, 48.5% (n = 97) of subjects practicing from <1 months,

Ratrijagarana

The distribution of responses shows 46.5% (n = 93) of subjects engaging in this activity daily. Regarding the duration of *Ratrijagarana*, 48.5% (n = 97) of subjects practicing from <1 months.

Vegadharana

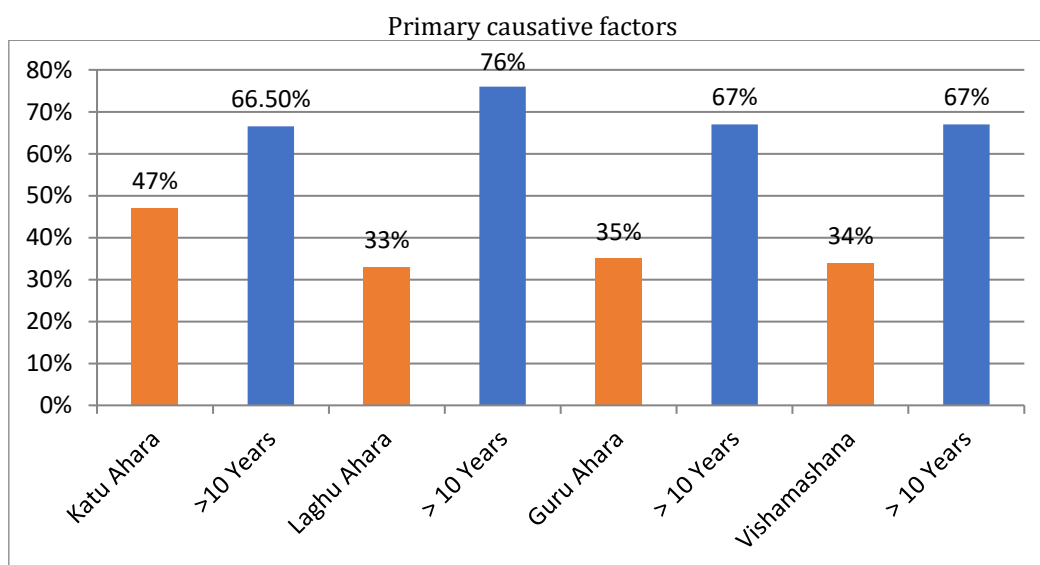
The distribution of responses indicates that 43.5% (n = 87) of subjects engaging in this practice daily. Regarding the duration, 44.0% (n = 109) of subjects engaging in *Vegadharana* for >10 years.

Diwaswapna

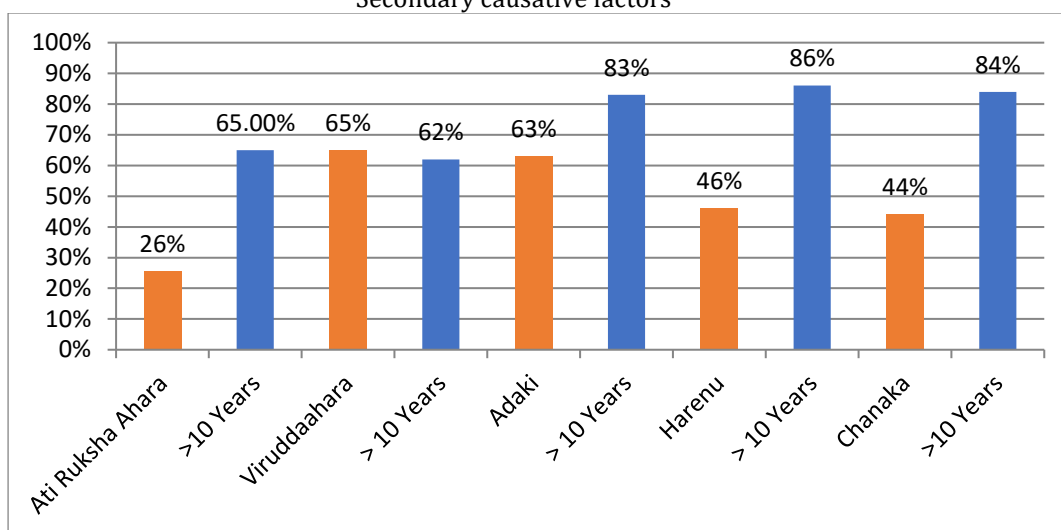
The responses shows that an equal proportion of subjects, 42.0% (n = 84) engaging in this practice daily and weekly. Regarding the duration, 64.5% (n = 129) of subjects have been practicing *Diwaswapna* for more than 10 years.

OVER ALL OBSERVATION OF AHARAJA AND VIHARAJA NIDANA

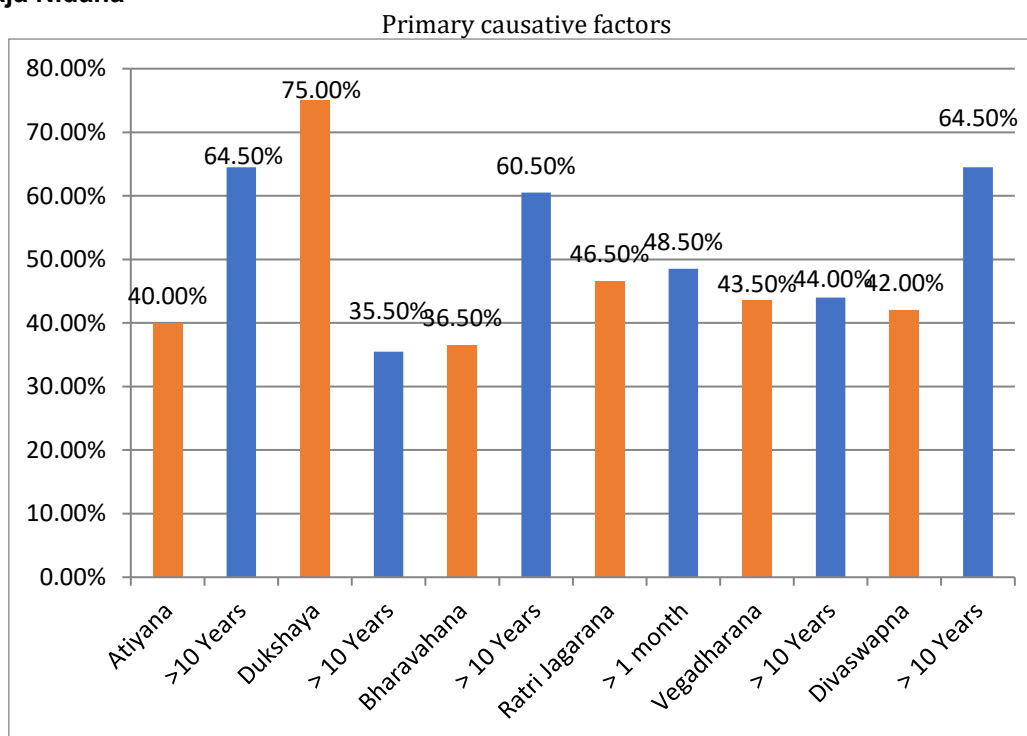
Graph No 87 Showing over all observation of Aharaja Nidana with Daily frequency. Aharaja Nidana



Graph No 88 Showing over all observation of Aharaja Nidana with Weekly frequency. Secondary causative factors



Graph No 89 Showing over all observation of Viharaja Nidana with Weekly frequency. Viharaja Nidana



DISCUSSION

The present study was a retrospective observational study to assess *aharaja* and *viharaja nidana* in the causation of *Gridhrasi*. Here an effort is made to discuss on,

1. Discussion on *Gridhrasi*.
2. Discussion on observations.

DISCUSSION ON GRIDHRASI

Gridhrasi is a *Rujapradhana Vata Nanatmaja Vyadhi*, intervening with the functional ability of low back and lower limbs. It is a neuro

muscular disorder which possesses a serious hazard to quality of life in the most productive group of population in India at present and particularly seen in the most active period of life involving working class people causing hindrance in routine life.

The chance of occurrence of *Gridhrasi* is expected to increase in the future years due to increased tendency of unwholesome diet, computerization, sedentary life style, improper posture while sleeping -sitting, hectic

routines, day sleep, awakening hours at night and excessive travelling.

Gridhrasi is a disorder dominated by *Ruk*, affecting the *Kandara*. Mainly *Vata* and *Kapha dosha* are involved in the clinical presentation. The *Prakupita vata dosha* which afflicts the *Kandara*, *Snayu*, *Asthi* and *Mamsa* involving the related *Srotas*. Disease being one among eighty types of *Nanatmaja Vatavyadhi*, with no specific *Nidana* and *Samprapti* has been mentioned separately. Onset of *Ruk* initially in the *Sphika* region and radiating distally to *Kati*, *Prishta*, *Janu* and *Jangha* till *Pada* is the unique feature of *Gridhrasi*.

DISCUSSION ON NIDANA

The term '*nidana*' has been used in two different contexts i.e. *Vyadhi janaka nidana* and *Vyadhi bodhaka nidana*. *Vyadhi-janaka nidana* means etiological factors of disease. *Vyadhi-bhodhaka nidana* means tools to diagnose a disease, which includes *nidana*, *purvarupa*, *rupa*, *upashaya* and *samprapti* (*nidana-panchaka*).

1. *Vyadhi janaka nidana* is the first and foremost factor which initiates the *samprapti* and has crucial role in the diagnosis as well as treatment. Acharya Madhava has mentioned *nidana* as prime etiological factors for the occurrence of the diseases. Acharya Vagbhata opines in *Astanga sangraha* as, *nidana* which aggravates *Vatadi dosha* primarily due to intake of *ahitahara* and *ahitavihara*.
2. *Vyadhi-bhodhaka nidana* are five tools mainly for the diagnosis of *vyadhi*. These *nidanapanchaka* are subjective as well as objective. This concept and principles are utilized to understand the whole pathway of the *Vyadhi*.

Vata Prokopaka Hetu

Nidana which are having properties similar to *vata* and excessive exposure to these factors acts as *nidana* for *vata prakopa*. For better understanding *vata dosha prakopaka nidana* can be categorized into *aharaja*, *viharaja*, *manasika* and *anyaja*.

Vata Prokopaka Aharaja Hetu: *Aharaja hetu* they are further classified based on *rasa pradhanyata*, *guna pradhanyata*, *ahara dravya* and *ahara krama*.

Rasa Pradhanyata

Katu rasa- Has *vayu* and *agni mahabhuta* dominance. It has *laghu* and *ruksha guna*. It causes *toda* and *bheda* in the region of *charana* (feet), *bhuja* (shoulders), *parshwa* (flanks), *prista*(back) and causes diseases of *vata*⁵.

Tikta rasa- It possesses *sheeta* (cold), *ruksha* (dry), *khara* (roughness) and *vishada guna* which is homologues with *vata guna*. Because of *ruksha guna* it does *shoshana* of *rasa*, *rakta*, *mamsadi dhatu*, *Khara guna in Tikta rasa* brings about *kharatva in srotas* reduces *bala* (strength), causes *karshyata* (emaciation) and results in *vata vikar*⁶.

Kashaya rasa- Has *vayu* and *akasha mahabhuta* dominance It is *kaphapittahara*, *rakta prashamana*. Having properties like *ruksha*, *sheeta*, *laghu*. Excessive consumption of *sheeta guna* leads to obstruction of *srotas*, hinders the movement of *vata*, *mutra*, *pureesha*, *retas*. The *guna* like *khara*, *vishada* and *ruksha* produces *Pakshavadha*, *Apatanaka*, *Ardita*, *Gridhrasi* and other *vata vikar*⁷.

Guna Pradhanyata

Laghu guna- It does *kapha shamana* and *vata vardhaka*. This *guna* is shared by *akasha*, *vayu* and *agni mahabhuta*. *Katu* and *kashaya rasa* are having *laghu guna*. *Katu vipaka is laghu* in nature⁸.

Sheeta guna- Subside *pitta* and aggravates *vatakapha*. This *guna* is shared by *jala* and *vayu mahabhuta*. Among *rasa madhura*, *tikta* and *kashaya* possess *sheeta guna*. *Madura vipaka is sheeta* in nature⁹.

Ruksha guna- It is responsible for *shoshana*, *katinatva* and *rukshana* actions. *Ruksha guna* is mainly related to *vayu mahabhuta*. It subsides *kapha* and aggravates *vata*. *Ruksha* is predominant in *katu*, *tikta*, *kashaya*, *rasa* and *katu vipaka*¹⁰.

AHARA DRAVYA

Mudga (green gram) It belongs to *shimbi dhanya varga*. It has *kashaya- madura rasa*, *ruksha-laghu –vishada guna*, *sheeta virya* and *katu vipaka*. It mitigates *pittakapha*¹¹ and *vatakara*.

Chanaka (Chick pea) and **Harenu** (Green peas) -They possess *madura-kashaya rasa*, *ruksha-laghu guna*, *sheeta virya*, mitigates *pittakapha* and are *vatala*¹². **Adhaki** (Tur dal)- These *dravya* possess *kashaya* and *swadu rasa*, *katu vipaka*, *hima* and *laghu guna*. It is *vatala* and *pittakaphaghna*¹³.

Astanga hrudaya mentions that *Mudga*, *Adhaki* and other varieties belonging to this group leads to *vibandha* (constipation). **Nishpava** (Flat beans) -It aggravates *vata*, *pitta*¹⁴. *Astanga hrudaya* mentions that, *nishpava* aggravates *raktha* and increases production of *stanya* and *mutra*. It produces *vidaha* (burning sensation). It possesses *guru* and *sara guna*, reduces *shopha*, *kapha* and *shukra dhatu*¹⁵.

Tumba (Bottle gourd)-It has *ruksha*, *guru*

guna, sheeta virya and *vatala*. It is beneficial in *varchobheda*¹⁶. In *astanga hrudaya* Vagbhata says *Tumba* is *rukshatara* and *grahi*.

VATA PROKOPAKA VIHARAJA NIDANA:

Ati vyavaya It leads to *shukra dhatu kshaya*. Due to this, *pratiloma kshaya* of all the *dhatu* occurs. *Dhatukshaya*¹⁷ further acts as a causative factor for manifestation of *vatavyadhi*. **Ati vyayama** leads to *trushna* (thirst), *kshaya*, *pratamaka*, *jwara*, *kasa*, *chardi*, *rakthapitta*, *shrama* and *klama*¹⁸. *Balam vyaayama shaktya parisksheta* If the person continues *ativyayama*, it gradually leads to *krushata*, *sarvadhātu kshaya*, *ojokshaya* and hence decreased *vyadhi kshamata*. Those who indulge in *ati vyayama*, *jagarana*, *adhwa*, *stree*, *hasya* and *bhashya* will perish just like lion dies soon after killing an elephant. This indicates severe strain and consequent exhaustion¹⁹. **Ratri jagarana** - *Ratri jagarana* imparts *rukshata* in the body. This contributes to the *ruksha guna* of *vata* and brings about *vata prakopa* on indulgence in *ratri jagarana* for long duration²⁰. **Vega dharana and vega udeerana** - For living a normal healthy life, it is necessary that the needs of natural urges are satisfied instantaneously, as soon as explicit. Sushruta explains if one does *vegadharana* for long duration leads to *vata prakopa* and suffers from *udavarta*²¹.

KAPHA PROKOPAKA AHARAJA HETU:

For better understanding *Aharaaja Hetu* are further classified based on *Guna pradhanyata*, *Ahara Dravya* and *Ahara Krama* (food patterns). **Sheeta Guna**- This is mainly formed by *Ap Mahabhuta*. It removes the *Ushnata* of the body and pacifies *daha* (burning sensation). It acts as *Pittashamaka* and *Vatakapha Vardhaka*. It has got the action of *Stambhana*. It delays or stops excretion of *Pureesha* and *Sewda*, but acts as *Mutrala*. It gives pleasure to mind, act as *Dhatu Vardhaka* and *Raktastambhaka*²². **Guru Guna**- Commonly it is known as heaviness. When there is gravity in a substance then it possesses *Guru Guna*. It causes heaviness of the body. It makes *Agni* to become dull or diminishes by its property. It acts as *Vatahara* and *Kapha prakopaka*. It increases the *Dhatu*, gives nourishment and strength to the body. It helps in the formation of *Mala* and causes *Upalepa* in the *Srotas*. *Guru Guna* is a special character of *Prithivi-Mahabhuta*. *Charaka*, *Susruta* and *Nagarjuna* have also stated that *Gurutva* is the character of *Apyamahabhuta*²³. **Abhishyandhi**- The

dravya which bring about excessive *Kleda in Dosha, Dhatu, Mala and Srotas* due to the properties of *Picchila, Guru and Snigdha* are known as *Abhishyandi*. Eg- *Dhadhi*. These *dravya* increases *Kapha dosha* and causes obstruction to the *srotas*²⁴.

AHARA DRAVYA

Godhuma - It is *Sandhanakara, Vatahara, Swadu* in taste, *Sheetala*. *Jivaniya, Brumhaniya, Vrishya, Snigdha, Sthairyakara* and possess *Guru guna*²⁵. **Narikela**- It is *Madura, Brumhana, Vrushya, Guru* for digestion and cold in potency and useful in *Kshaya, Kshata and Daha*²⁶. **Dadhi** - It is *Rochana, Deepanam, Vrushya, Balakara, Amla Vipaka, Ushna veerya*, alleviates *Vata*, is auspicious and *Dardhyakara*. It is useful in *Pratishyayya, Atisara, Aruchi, Mutrakruhra* and *Kshaya*. It is not advised in autumn, summer and spring. It is also harmful in the disorders caused by *Rakta, Pitta* and *Kapha*²⁷. **Dugdha**- Which is obtained from cow is *Jeevaniya, Guru, Madhura, Snigdha, Sheetala, Vatahara, Shleshmala, Vrushya and Satmya*²⁸. **Adhyasana**- If food is taken before previous food is digested is known as *Adhyasana Samasana, Vishamasana, Adhyasana* lead to immediate death or causes many disorders like *Ajirana* etc²⁹. General Symptoms of *Ajirna* includes the non-elimination or too much elimination of feces, urine and *dosha*. Moreover, the patient feels *Glani, Marutamudata (Pratiloma Gati of Vata) Gourava, Bhrama* and *Vishtamba*³⁰.

KAPHA PRAKOPAKA VIHARAJA NIDANA

Diwa-Swapna- Sleeping during day time in seasons other than *Grishma Ritu* causes vitiation of *Kapha* and *Pitta*. The increased *Kledatva* contributes to *Vikruta Kapha dosha*. *Nidana* is prime factor responsible for bringing changes in *Prakruta dosha* and transform to *Vikruta*. Hence knowledge of *dosha Prakopa Nidana* helps to adopt *Nidana Parivarjana* and following *Patya* in order to maintain health and prevent diseases.

DISCUSSION ON SAMPRAPTI

Role of Vata in Gridhrasi

Gridhrasi is one among 80 *Nanatmaja Vata Vyadhi* i.e., it is caused only because of vitiated *Vata*. Hence, *Vataprakopaka Lakshana* like *Shoola, Supti, Stambha* etc. are found as the cardinal symptoms in the disease. Depending on the *Karma & Sthana* we can assume that *Apana and Vyana Vata dushti* can be assessed in *Gridhrasi*. *Gati, Prasarana* (extension) *Akunchana* (flexion), *Utkshepana* (lifting) etc. are the functions of *Prakruta*

Vyana Vata.³¹. The hampered *Sakthikshepa Karma* indicates *Vyana Vayu dushti*. In *Gridhrasi*, the *Sthanasamshraya* takes place in *Sphik, Kati, Pristha* affecting the *Kandara* of leg which are the *Ashraya Sthana* of *Apna Vayu*.³².

There are two main reasons by which *Vata* get vitiated. They are *Dhatukshaya* and *Margavarodha*.³³. Because of the *Samprapti Vishesh*, the same *Nidana* produce different *Vata Vyadhi*. This is because the presentation of the disease changes according to the *Sthana* where *Dosha-Dushya Sammurchhana* takes place. *Khavaigunya* plays an important role in the disease process. In *Gridhrasi*, because of improper posture, travelling in jerky vehicles, carrying heavy loads or sometimes spinal cord injury are responsible for producing *Sthanaigunya* at *Kati, Sphika, Pristha* etc. They may not be able to produce the disease at the instance, but after acquiring some *Vyanjaka Hetu* (exciting cause) the disease may be produced.

The *Vataja Gridhrasi* separately produced by *Vata Prakopa* having symptom of *Stambha, Ruk, Toda* and *Muhu Spandana*. *Vata Prakopa Ahara Vihara* gives rise to aggravation of *Vata* and at the same time *Ruksha, Laghu, Sheeta, Daruna, Vishada, Chala guna* of *Vata* suppresses the *Snigdha, Guru, Mrudu, Pichhila* and *Sandra guna* of *Kapha*, which reduce the *Sleshma*. Reducing of *Sleshma* in *Prista, Kati, Sakthi, Kandara* replaces by vitiated *Vata*. In this way, *Vata* located in *Kandara* produces the symptoms viz. *Stambha, Ruka, Toda, Spandana* in *Kati, Prustha, Uru, Janu, Jangha* and *Pada* in respective order.³⁴.

During the description of *Vata-Kaphaja Gridhrasi*. Acharya Charaka explained the symptoms – *Aruchi, Tandra* and *Gaurava* in addition to the *Vataja* symptoms. Along with *Vata Prakopaka nidana Kapha Prakopaka nidana* gives rise to *Agnimandya*, which leads to accumulation of *Ama* frequently. This condition also affects the *Agni* of *Rasa dhatu*, resulting in the production of *Kapha* abundantly as *Mala* of *Rasa Dhatu*.³⁵.

In this *Samprapti, Prakupita Vata* does not suppress the *Kapha* as explained in *Vataja Gridhrasi*. Here *Prakupita Vata* also bound *Agnimandya* and ultimately helps in accumulation of *Kapha*. On the other hand, *Kha-Vaigunya* occurs due to *Nidana Sevana* in *Kati, Prista, Sakthi* and *Kandara*. Thus, both vitiated *Vata* and *Kapha* by spreading get localized at the place of *KhaVaigunya*. In the *Sthansamshraya*, that vitiated *Vata* get

covered by *Kapha* and produced symptoms of *Vata-Kaphaja Gridhrasi*.

DISCUSSION ON OBSERVATION

Demographic Data:

Age: In the study of 200 subjects, 54.0% of the subjects were between 31-50 years age groups. This shows that, the disease prevalent in the middle age group of subjects. According to *Acharya Sushruta*, it is *Madhyama Avastha*, during which *Sharira Bala* and *Dhatu* gradually deteriorate and cause aggravation of *Vata dosha*.³⁶. Middle aged individuals are more exposed to strong biochemical force and heavy work in comparison to children & older. Hydration in the intervertebral disc decreases gradually with age which triggers a cycle of deterioration that results in disc diseases.³⁷.

Gender: In this study, maximum 51% patients were male and remaining 49% patients were females. This might be because of the fact that more strenuous physical work, jerks during driving, etc are risk factors considered for *Gridhrasi*. When it comes to females, they commonly engage in postural stress activities such bending, lifting, sitting and maintaining abnormal postures while performing daily domestic tasks. Such positions could be considered risk factors for the disease.

Marital Status: Incidence according to marital status showed with 84.0% were married. Juggling household chores, lifestyle practices, such as the division of household labour, increased stress and the adoption of family traditions could influence in the manifestation of disease.

Occupation: The largest proportion of participants were housewives i.e. 41.5%, 40.5% software engineers, 14.5% teachers & farmers. Most of the housewives were involved in household chores and involved in irregular food habits/ untimely food leading to *Vishamagni* and further leads to *vata dushti*. In software engineers due to their sedentary lifestyle and office job as they adopt improper postural habits along with minimum movement of spine leading to spasm of para-spinal muscles which is considered as an important causative factor for *Gridhrasi*. Hence, from these findings it can be said that the continuous strain on the vertebrae may be the leading cause of the disease, which supports to the textual etiological factors.³⁸.

Chief Complaints

Ruk and Sthamba: The widespread pain and stiffness reported by participants align with the

symptoms of *Gridhrasi*, where *Vata dosha* is predominantly aggravated. These symptoms are often the result of both *Aharaja* and *Viharaja Nidana*, such as the consumption of *Vata*-aggravating foods (dry, cold, and light foods) and lifestyle factors like excessive physical strain or prolonged inactivity due to sedentary life style. The similar distribution of pain and stiffness across both legs and specific legs suggests a systemic issue that could be linked to widespread *Vata* aggravation.

Disease Duration and Diagnosis: The chronic nature of the disease, with 45.0% of participants suffering for 6-12 months, reflects prolonged exposure to *Viharaja Nidana* like long-term sedentary behaviour, poor posture etc. this chronicity in *Gridhrasi* often indicates that lifestyle changes have not been addressed or that the individual's exposure to *Aharaja Nidana* such as, a diet high in processed food or low in essential nutrients has persisted. The smaller group with a disease duration of more than one year (3.5%) might represent individuals with particularly entrenched habits or severe dietary imbalances, leading to ongoing *Vata* aggravation and difficulty in managing the condition.

FOOD HABITS

Type of Ahara: The predominance of a mixed diet among 68.0% of subjects, points to the inclusion of both vegetarian and non-vegetarian foods, which may influence the development of *Aharaja Nidana*. Sulphur is found in sour foods, spicy foods, fried food and in meat. Sulphur can change the pH of the blood, due to its high acidity. This can cause demineralization of bone tissue, which results in joint and spine conditions like Lumbar spondylosis etc. Non-vegetarian foods, particularly red meat, are often considered heavy and may contribute to *Ama* formation and *Vata* aggravation when consumed in excess or improperly digested. The 32.0% following a vegetarian diet might experience different risks, such as the potential for *Vata* aggravation from consuming dry, light and cold foods.³⁹

NIDANA SEVANA

Ati Katu Ahara: Among 200 subjects, 47.0% subjects were consumed *Ati Katu Ahara* **daily (>2 times)**, 66.5% of them had practiced it >10 years. Most of them were found to be indulging in intake of Green/ Red chilli & its powder, chips, panipuri, manchurians, pickle etc. *Katu Rasa* has *Vayu* and *Agni Mahabhuta*, *Laghu* and *Ruksha Guna*. It causes *Toda* and

Bheda in the region of *Charana* (feet), *Bhuja* (shoulders), *Parshwa* (flanks), *Prista* (back) and causes the diseases of *Vata*⁴⁰. *Laghu* and *Ruksha Guna* of *Katu Rasa* results in *Vataprakopa* and *Kapha Kshaya*. This *Prakupita Vata* when takes *Sthana Samshraya* in *kati Pradesha* causes *shula*. Capsaicin is the active component present in chili, peppers and this can trigger an inflammatory response in the body that may aggravate the spinal conditions⁴¹. **Ati Tikta Ahara:** 50.5% were habituated **monthly (3-4 times)** to *Ati Tikta Ahara* with 67.0% of subjects reporting this practice for > 10 years. *Tiktha* having properties like *Ruksha*, *Khara*, *Vishada* because of these guna it affects *Rasa*, *Raktha*, *Mamsa*, *Medas*, *Asthi*, and *Majja* and this excess *Tiktha Rasa* can produces *Vata Vyadhi* like *Gridhrasi*. This tikta rasa ahara produces *Vata Prakopaka*, this leads to *Asthivaha srotodusti*. Less frequent with prolonged exposure to *Tikta Ahara* could gradually influence the *Vata dosha*, potentially contributing to the condition over time. **Ati Kashaya Ahara:** Among selected subjects 39.5% consumed *Ati Kashaya Ahara* **monthly (1-3 times)**, with 69.5% were practicing it for >10 years. *Kashaya Rasa* has *Khara* and *Vishada Guna*. When this consumed excessively or by its *Atiyoga* causes *Stambha*, *Sphurana*^{42,43} and produces *Vatavyadhi* like *Gridhrasi*. **Ati Laghu Ahara Sevana:** Among 200 subjects 33.0% are having **daily (1-2 times)** consumption, with 74.0% practicing this for >10 years. Most of them were taking rice boiled ganji, hot water, dal/ vegetable soups, butter milk. *Laghu Guna* is shared by *Akasha*, *Vayu* and *Agni Mahabhuta*, having *laghu* and *Sukshma guna in it*⁴⁴. Excessive consumption of *Laghu Ahara* leads to increase in *Laghu Guna of Vata* and does *Kapha Shamana*. It can be interpreted as, because of *Laghu* and *Sukshma Guna*, there will be *prakopa of vata* and *Saushirya of Asthi dhatu* takes place, this *Prakupita Vata* takes *Sthanasamsraya* in *kati*, *prishta* and thereby produces *Ruk, toda* in *kati* etc leads to the disease *Gridhrasi*. **Ati Sheeta Ahara Sevana:** 41.5% were habituated this **monthly (3-4 times)** with 62.0% subjects practicing for >10 years. *Stambhana* is the *Karma of Sheeta Guna*⁴⁵. *Sheeta Guna* which is the inherent property of *Vata Dosha*⁴⁶. Excessive *Sheeta Ahara* causes *Stambhana* in *Srotas*, *Snayu* and *Kandara* this is manifested by the restricted movements, stiffness in the lower extremities. *Ahara Dravya* which are

having *Sheeta Guna* ingested excessively, causes *Vataprakopa* and produces the disease like *Gridhrasi*, which is by the principle of '*Samanyam Vriddhikaranam*'⁴⁷. **Ati Guru ahara:** 35.0% were consuming **daily (>2times)** *Guru Ahara* with 67.0% of practicing this >10 years. Because of *Pichchhila* and *Guru guna*, it causes *Sroto Avrodha* takes longer time for digestion thereby causes *Agnidushti* and produces *Ama* by *Sanga* due to which proper nourishment of *dhatu* does not takes place and causes *Vata Prakopa* leads to the disease *Gridhrasi*. According to some studies it's found that intake of sweets, desserts, hydrogenated fat, soft drink releases insulin and stress hormones, which can trigger the inflammation. This inflammation can cause swelling and compress the nerves or soft tissues of spine lead to the pain over the lumbar region. Excess sugar and high calories can lead to weight gain, which puts more stress on spine and causes spinal discs to wear down faster. **Viruddhaahara:** 37.5% were consuming it **weekly (>3times)** with 68.0% of participants practicing >10 years. Intake of *Viruddha Ahara* regularly and continuously increasing nowadays. Habit of taking milk with sour fruits like milk shakes, consuming curd at night, taking *Madhura rasa ahara* at the end of meals and intake of cold water immediately after intake of warm meals/ hot coffee/ tea were common. *Viruddha Ahara* causes *Agnimandya* and development of *Ama*, which disrupts the metabolism of the tissue results in *Avaran Janya Vata Prakopa*. Regular use of *Viruddha Ahara* may cause inflammation at the molecular level⁴⁸, leads to impairment in *Agni* and unable to digest even the *Laghu Ahara* resulting in indigestion. *Acharya Charak* also quotes that, effect of *Viruddha Ahara* is not seen in persons who takes in small quantity, not regularly, with proper *Agni* or who does proper exercise. So, all these points are taken into consideration, *Viruddha Ahara* causes *Strotoavrodha* and *Vata Vruddhi* and contributing to the disease *Gridhrasi*. **Ruksha Ahara: Weekly** 46.0% (**>2times**) consumption of *Shuska Shaka Ahara*, with 65.0% of persons practicing this for >10 years. Excessive use of *Ruksha Dravya* leads to *Vata dosha prakopa* which ultimately causes *Vishamagni*. *Ruksha Guna* by its *Shoshana karma* it dries out the *Snehamsha* in the *Asth*⁴⁹. *Asthigata Sneha gets affect by the Ruksha guna and as Ruksha Guna is Kathinyakara, Sthamba* is produced in the

disease *Gridhrasi*. **Shuska Vallura Ahara: Weekly** 42.5% (**2 times**) consumption of *Shuska Vallura Ahara* was most prevalent with 56.5% practicing this more than 10 years. Excess consumption *Shushka ahara* having *Rooksha pradhana* brings about *Vata Prakopa* in *Pakswashaya* during *Katu Avasthapaka*. This *prakupita vata* does *Shoshana* of *Sarva shareera* leading to *Kshaya* of *Sleshaka Kapha*. In this context, it is compared to reduction in joint lubrication resulting in degenerative changes seen in nucleus pulposus and annulus fibrosis leading to weakening of intervertebral disc resulting in reduction in intervertebral space and resulting in spine disorders. **Mudga: Monthly (>3times)** consumption of *Mudga* was 50.5% with 83.5% of people were practicing it >10 years. *Mudga* has *kashaya- madura rasa, laghu ruksha-vishada guna, sheeta virya, and vatavardhaka*. All these properties having *vata* dominance, regular intake of *Mudga* over many years could potentially influence the *vata dosha* leading to the disease *Gridhrasi*. **Raja Masha:** 38.5% were consuming it **monthly (>2times)** with 81.5% subjects practicing over 10 years. It has *kashaya pradhana, Ruksha guna, sheeta virya*, which intensifies the *vata* guna and does *shoshana* of the *kandara, sira, snayu*. The long-term consumption of *Raja Masha* even if not frequently, contributing for the occurrence of the disease *Gridhrasi*. **Adaki:** In the 200 study subjects, 63.0% were consuming it **Weekly (>4times)** with 83.5% subjects they were practicing >10 years. **Harenu: Weekly (>2times)** consumption of *Harenu* was 46.0%, closely followed by weekly consumption 44.5% with 85.5% practicing this for >10 years. **Chanaka: Weekly(>3times)** 48.5%, consumption of *Chanaka* was most common with 84.0% of participants practicing >10 years. *Adaki, Harenu, Chanaka* are possess *Kashaya rasa, laghu, ruksha, sheeta guna* and *sheeta veerya*. All these properties having *Vata* dominance, long term consumption of these *ahara dravya* even not in frequent resulting in *Asthivaha sroto dushti* and contributing to the occurrence of *Vatavyadhi* like *Gridhrasi*. **Tumba: Monthly (>2times)** consumption of *Tumba* was 58.5% with 77.0% of subjects were practicing this for >10 years. Because of *ruksha guna, sheeta virya* and *vatakara* property, the long-term consumption of *Tumba*, even if not frequently, may trigger the disease *Gridhrasi*. **Anashana & Abhojana:**

With 46.5% **occasional (2-3month once)** practice of *Anashana* & *Abhojana* was observed, with 62.0% persons were practicing it for >10 years. The long-term practice of fasting or skipping meals and infrequent fasting causes *agnidushti* leads to *vishamagni* and does *vata prakopa*. When sustained it over many years even if occasionally, contributing to the development of *Gridhrasi*.

Alpashana, Langhana & Pramitashana: Occasional 57.0% (2-3month once) practice of *Alpashana, Langhana* & *Pramitashana* with 57.5% subjects consumes it >10 years. *Alpa ahara* related to *Matra of Ahara*, the long-term practice of eating less or controlled eating, causes improper *dhatu Poshana* leading to *Vata Prakopa* leading to *Vataja Gridhrasi*. Even if occasional, may play a role in disease *Gridhrasi*. **Vishamashana: Daily (>2times)** practice of *Vishamashana* was reported by 34.0% of the participants with 67.0% of subjects consumes >10 years. *Atitakala bhojana* \ irregular eating over an extended period causes *agnidushti* produces *vishamagni* and leads to the *Ama* formation, thereby causes *vata prakopa*, this *prakupita vata* takes *sthanasamsraya* in *kati*, etc. causes pain. Some studies show skipping meals or irregular eating habits can increase cortisol levels and contribute to Low back pain⁵⁰.

Adhyashana: Weekly (>2-3 time) 57.0% practice of *Adhyashana* was common with 70.0% subjects were practicing for >10years. Eating food before the previous meal gets digested, which disrupts the digestive processes leads to *Mandagni*, which is the main cause for every disease to happen, to the formation of *Ama* also and causes *tridosha prakopa*. Among *tridosha*, *prakupita vata* produces *lakshana* like *Angamarda, parshwa, prishta* and *katigraha, shula* etc. **Ati vyayama: Weekly** practice of *Ativyayama* was reported by 19.5%, with 26.0% practicing this for over 10years. Performing excessive exercise is *Vata Prakopaka* and *Kaphahara*. *Prakupita Vata* moves through the *Asthivaha srotas*, gets *Stanasamsraya* in *Kati Pradesha* and particularly afflicts the *Kati Pradesha*. Researches shows excessive physical strain will exert greater pressure and strain over lumbar joints, which triggers the disc lesions leading to *Gridhrasi*.

Ati vyavaya: Among 200, **weekly** 41.0% subjects were indulged in *Ativyavaya* with 55.5% >8years. The long-term practice of excessive sexual activity, could potentially leads to *pratilomakshaya* of *dhatu* and causes

Vatavridhi leads to disease of *vata*. *Ucchabhashya*: Occasional 48.0% practice of *Ucchabhashya* was observed with 54.0% of participants practicing this for over 10 years. Both laughing loudly and talking continuously causes *Vata Prakopa*, the long-term practice even if occasionally, may play a role in *Gridhrasi* development. **AtiYana:** During the study of 200 subjects, 40.0% were indulged in *atiyana* **daily** with 61.5% indulges > 10 years. In present study bikers and bus passengers with >80km a day were more affected. This shows that daily riding in improper, bumpy roads can cause vibrations this leads to muscle strain and backache. There are a lot of reasons of backache in travellers but the basic reasons noticed were, vibration of the vehicle and wrong posture⁵¹. Another study said that, the potholes road can also cause microtrauma that leads to sprain or strain over the spine especially the lumbar area and produces radiating pain from lumbar region to lower limbs. **Atiadhwa: Weekly** practice of *Atiadhwa* was observed 30.5%, closely followed by **daily** practice 28.0%, with 44.5% subjects were practicing it for >10 years with > 8-10km a day. Excessive walking causes *Rukshata* and *Vataprakopa*. By this *Swanidanajanya*, *Vata* vitiation takes place. The piriformis muscle mainly helps in walking. While walking, which crosses downwards and attaches to the lateral side of the femur and gives excess pressure on piriformis muscle which may irritate sciatic nerve, causing pain in the buttocks and radiating to the lower limb. *Atiadhwa* also produce *Kha-Vaigunya* and *vata* takes *Sthanasamsraya* in *kati, prishta, uru, janu* and *jangha* thus leads to *Gridhrasi*. **Dukhashayya: Daily** experience of *Dukhashayya* was reported by 75.0% with 37.0% experiencing this for over 10 years with use of soft mattress by 38.5% of the subjects. 38.5% of the subjects were using the soft mattress for >5years. The long-term practice of sleeping over an uncomfortable bed or soft mattress, the normal curvature of the spine is not maintained, which gives extra pressure on muscles and joints thus causes injury to soft tissues and vertebrae leads to the diseases of spine. In this study, the most common posture by the subjects is prone with 49.0%. According to study conducted in May 2024, the prone position offers the least support for the lower back and is not recommended for individuals with low back pain⁵². Prone position is the most avoided posture for sleeping. Although body weight is more evenly

distributed in the prone and supine positions. These positions may increase lumbar lordosis, subsequently loading the lumbar facet joints. Moreover, the prone position is associated with significant issues such as buckling of the ligamentum flavum, increased spondylolisthesis and facet joint subluxation leading to foraminal stenosis, as observed in magnetic resonance imaging in patients with low back pain with or without radiculopathy⁵³.

Dukhaasana: Daily practice of *Dukhaasana* was reported by 57.0% of participants, with 54.0%. In this study 36.5% subjects were sitting in improper postures >7 hours per day, this can cause *Vataprakopa* and leads to weakness and wasting of postural muscles. Study suggested that sitting for prolonged period results in postural changes such as the flatness of the lumbar-lordotic curve, chronic muscle deconditioning etc. and that decreases the muscle activity. When persons adopting static posture for a long period even at low loads can cause muscular fatigue leads to the misalignments of spinal vertebrae⁵⁴.

Bharavahana: Daily practice of *Bharavahana* was reported by 36.5% with 61.5% practicing >10 years and 34.0% of the subject's carried weights between 20-50 kgs. Carrying heavy loads is mentioned under *Sahasakarma*, which produce *chayapoorvaka Vataprakopa* and exerts pressure over *Kati* leads to the *shula* in *Sphika*, *Prishta* and *Kati Pradesha*. Attempting to lift and twist with heavy loads causes intervertebral disc rupture in lumbar region. This excessive compressional load may act on the nucleus pulposus gradually leads to the disc degeneration, vertical compression of spinal segments etc. Along with this, microtrauma will suddenly increase the pressure over lumbar region result in rupture of annulus fibroses leading to irritation or compression over sciatic nerve. According to some studies, using excessive weights during weightlifting techniques can compromise body posture and lead to body tilt and back flexion. This increases the stress over the spine of the weightlifter and renders lumbar area highly prone to injury⁵⁵.

Ratrijagarana: Daily practice of *Ratrijagarana* was reported by 46.5% of participants with 48.5% practicing this for >1-2 months. The practice of staying awake or sleeplessness at night causes *Vata Prakopa* and produces *Rukshata* in the *Sarva Shareera*. In a recent study showed, persons with low back pain who reported sleep disturbance/sleeplessness were more likely to attend a

hospital for their pain and also poor sleep can cause muscle tension and stiffness, which can make lower back pain worse. Moreover, individuals with insomnia symptoms have a mild increase in basal cortisol levels and a hyper-reactivity of the Hypothalamus-pituitary-adrenal axis, which are associated with pain sensitivity⁵⁶. Another reason may be for irregular or regular *ratrijagarana* is, pain dominant nature of the disease.

Vegadharana: Daily practice of *Vegadharana* was most prevalent 43.5% with 54.5% of subjects practicing this for >10 years. Suppression and forceful expulsion of urges mainly *vata*, *Mutra*, and *Purisha* can lead to *Prakaopa* of *Vata dosha* especially *Apana Vata*. This *Prakupita Apana Vata* may result in *anaha*, *pindikodweshtana* and *adhovata avarodha*, which can see as *anubhandhi vedana* in most of the *vataja vikara* as like in *Gridhrasi*. **Diwaswapna:** Among 200 of the study participants 42.0% reported practicing *Diwaswapna* daily, with 60.0% practicing this for >10 years. Sleeping in daytime i.e. sleep after sunrise and before sunset. According to one study on '*Diwaswapna_Ratrijagarana_and_Vihaaraja_Pragyaparadha*', daytime sleep disrupts the circadian rhythm of digestive enzymes, delays gastric emptying by disrupting gastric myoelectric function and there is decrease in secretions of stomach, duodenum and liver. From this there will be alterations in the metabolic activity leads to the deficiencies in protein, iron, calcium and vit B12. All these can joint pain, muscle cramps and an increased risk of bone disorders like osteoporosis. Except in *Grishma Ritu*, it causes vitiation of *Kapha-Pitta* and also it is a cause for *agnidusht*⁵⁷, which results in excessive *ama* production. This excess of *ama* when combines with *Vata dosha* produces features like *Tandra*, *Aruchi*, *Gourava* etc all these *lakshana* seen in *Gridhrasi* especially in *Vata kaphaja*.

RESULTS AND CONCLUSION

This retrospective observational study involving 200 subjects provides valuable insights into the role of *Aharaja* and *Viharaja Nidana* in the causation of *Gridhrasi*. In the present study, based on observations following conclusions are drawn.

- For assessment of *Aharaja* and *Viharaja Nidana* questionnaire were utilized after content and face validation by the subject experts.

- Among *Aharaja Nidana*, Following are the primary causative factors:
 - Based on *Rasa Pradhanyata*- Daily practice of *Ati katu rasa sevana* with duration more than 10 years,
 - Based on *Guna Pradhanyata*- Daily practice of *Ati laghu, Ati guru ahara* with duration more than 10 years,
 - Based on *Ahara krama*- Daily practice of *Vishamashana* with duration more than 10 years.As Secondary causative factors:
 - Based on *Guna Pradhanyata*- Weekly practice of *Ati ruksha ahara* with duration more than 10 years.
 - Based on *Ahara Dravya*- Weekly practice of *Adaki, Harenu and Chanaka* with duration more than 10 years.
 - Weekly practice of *Viruddha ahara* with duration more than 10 years were found.
- Among *Viharaja Nidana*, Daily practice of *Ati yana, Dukkha shayya, Dukkha asana, Bharavahana, Ratrijagarana, Vegavidharana* and *Divaswapna* are the causative factors among the study subjects.

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