

## CLINICAL STUDY OF RASNAPANCHAKA KWATH IN SANDHIGATA VATA

Vaidya Patil Arati S.<sup>1</sup>, Dr.Parashurami S.P.<sup>2</sup>

<sup>1</sup>P.G. (Scholar), Department of Kaychikitsa, S.G.R. Ayurveda Mahavidyalaya, Solapur, Maharashtra, India

<sup>2</sup>Asso Professor, Dept. of Kaychikitsa, S. G. R. Ayurved Mahavidyalaya, Solapur, Maharashtra, India

### ABSTRACT

‘*SANDHIGATA VATA*’ the word itself describes about the disease i.e.it affects the *Sandhis*. It’s very important that one can do his daily activities (Walking, Sitting, Standing etc.) without any difficulty. *Sandhigata vata* cripples the life of patient by causing pain at *Sandhi* while walking or at rest as well. According to Physicians of Ayurveda, *Janu Sandhigata vata* is one of the common clinical problems in day to day practice. Taking this in consideration about *Sandhigata vata* the present Dissertation work is carried out entitled “**Clinical study of *Rasnapanchaka kwath* in *Sandhigata vata*”**. For present clinical study 30 patients were selected randomly from IPD & OPD of our hospital irrespective of Sex, Religion, Occupation and Socio-economic status of age in range from 25-70 years showed signs & symptoms of *Sandhigata vata* & used above regimen for 4 weeks. The *Rasnapanchaka kwath* 25 ml was given orally with prakshep of 3ml *Tila taila* two times in a day in *adhobhakta kala*. The follow up was recorded after every 4 weeks. The observations got are distributed & analyzed statistically. For obtaining results the Wilcoxon signed rank test was applied to data. The results showed that *Rasnapanchaka kwath* is significant in management of *Sandhigata vata*.

**KEY WORD:** *Sandhigata vata, Rasnapanchaka kwath, Tila taila* .

### INTRODUCTION:

Ayurveda is based on the fulcrum of *Atharav Veda* and is considered as its *upaveda* which elaborates the importance of preventive, promotive and curative aspects of health. Man is the most precious creature on earth, health is supreme foundation and diseases are destroyers of health. A long healthy life has been the cherished wish of man since antiquity.

The health care sector has much importance in our life because everyone knows that Good Health is a basic prerequisite to acquire materialistic, social & spiritual upliftment of individual. With diseased body one can't work. But today is the era of modernization

and fast life. In this Century peoples run as time run to earn money. Everybody is busy and living stressful life. This present era is full of chaos and strain due to lifestyle modification, change in dietary habits, urbanization. Changing of life style of modern human being has created several disturbances in his biological system. Advancement of busy, professional and social life, improper sitting posture in offices, continuous work in one position and overexertion is increasing day by day. In present day situation *Dinacharya, Rutucharya* and *Ratricharya* are quite contradictory to that of explained in classics. With more and more use of vehicles,

disturbed eating habits, unnecessary excessive travelling, redundant exercises like over walking, improper time schedule of sleep and work all have lead to vitiation in the *Vatadosha*. Obviously incidence of *vatavyadhi* is increased in the society. *Sandhigata vata* is one of the most common complaints amongst the varied range of *vatavyadhi*. It is end result of above routine faulty dietetic, irregular life style & responsible for early degenerative changes in bodily tissue and play a vital role in the manifestation of such degenerative disorder. The ability to do various works depends upon the ability of using joints. As soon as the man learned to stand erect, he has used this special ability to overcome the obstacles of nature, which depends on the strength of the joints. The moment a person loses ambulation, he not only becomes a burden to respective family and society but also has to lead a miserable and pathetic life. In this way, this disease is now becoming a significant threat to the working population. Among all Sandhi, *Janu Sandhigata vata* is leading cause of disability, which unable to walk independently. Numbers of patients suffering from *Janu Sandhigata vata* are more than other. Thus the basic prerequisites for achieving success in any walk of life are alarmingly compromised because of *Janu Sandhigata vata* and its incidence and prevalence is also surprisingly increasing. Globally approximately 250 million people have osteoarthritis of the knee (3.6% of the population) [1]. As *Sandhigata vata* is a *Vatavyadhi* and it is also believed that any type of pain cannot be without presence of *Vata*. The trouble of *Sandhi* by *Prakupita Vata* is the main phenomenon in *Samprapti* of *Sandhigata vata*. *Sandhis* are one of the type of *Marma* [2] and form a part of *Madhyama Roga Marga* and thus, involvement of *Madhyama Roga Marga*, *Vata Dosha* and *Dhatukshaya* figures disease

*Kashtasadhya*. In the conventional system of medicine, pain killers like NSAIDS, Narcotics, Corticosteroids, intra articular injections etc are given which gives temporary relief & lastly surgery (Knee replacement) has been done which are quite expensive, need hospitalization also causes adverse effects. Despite tremendous research and discovery of some useful remedies in the modern medical science, many queries about complication remain unanswered. Because of such problems, it effects not only the social and economic position of an individual but also his family; it also leads to draining of national resource due to work hour loss, resulting into diminished production. Many researches were conducted on this disease; still the complete cure of this is a mirage. So providing better quality of life with minimum pain and discomfort is the need of the hour. In *Ayurvedic* classics, our *Acharya* have given thousands of medicaments for specific disease one of them is *Rasnapanchaka kwath* [3]. *Ayurvedic* remedies have always been successful in the treatment of this element and its effects. This drug has been selected for trial to assess its efficacy in relieving one, from complaints of *Sandhigata vata*. I felt this compound need a scientific investigation and research to be brought into mainstream. The line of treatment that can be given at OPD and IPD level which is cost effective, without adverse effects is yet to be established.

So considering all above points this is effort made in this regard to evaluate the efficacy of *Rasnapanchaka kwatha* in *Sandhigata vata* as the subject for dissertation work under the title “**Clinical study of Rasnapanchaka kwath in Sandhigata vata.**” The study highlights both conceptual and clinical aspects related to the disease *Sandhigata vata*.

#### **AIMS AND OBJECTIVES**

**AIM:** Clinical study of *Rasnapanchaka kwath* in *Sandhigata vata*.

**OBJECTIVES**

1. To study the *nidanpanchak* of *Sandhigata vata*.
2. To review literature available on *Sandhigata vata* through ayurvedic texts.
3. To study the effect of *Rasnapanchaka kwath* in *Sandhigata vata vyadhi*.

**MATERIALS AND METHODS**

It is the most important part of research work dealing with any disease and

**Aushadhi Yoga:***Rasnapanchaka kwath*(*Chkradatta.25.7*)

**Contents of *Rasnapanchaka kwath* :**

1. *Rasna (Pluchea lanceolata)*
2. *Guduchi (Tinospora cordifolia)*
3. *Eranda (Ricinus communis)*
4. *Devdaru (Cedrus deodara)*
5. *Shunthi (Zinziber officinale)*

all in equal quantity

**TABLE NO-1: Showing the ingredient of ‘*Rasnapanchaka kwatha*’:**

Name	Rasa	Vipaka	Veerya	Guna	Doshagnata	Karmukata
<i>Rasna</i> <sup>[4]</sup> <i>Pluchea lanceolata</i>	Tikta	Katu	Ushna	Guru	vatakaphahar	Amaphcana
<i>Guduchi</i> <sup>[5]</sup> <i>Tinospora cordifolia</i>	Tikta, Kashaya	Madhura	Ushna	Laghu	Tridoshashaghna	Balya, Dipana, Rasayana, Sangrahi, Raktasodhaka, Jvaraghna
<i>Eranda</i> <sup>[6]</sup> <i>Ricinus communis</i>	Madhura	Madhura	ushna	Guru, Snigdha	vatakahar	Vatahara, Vrushya, amapachaka
<i>Devdaru</i> <sup>[7]</sup> <i>Cedrus deodara</i>	Tikta	Ushna	Katu	Laghu, Snigdha	vatakaphashamak	Kaphahara, Vatahara, Dushtavranashodhaka
<i>Shunthi</i> <sup>[8]</sup> <i>Zinziber officinale</i>	Rasa	Madhura	Ushna	Laghu, Snigdha	vatakaphashamak	Anulomana, Dipana, Hridya, Pachana, Va- takaphapaha.

**Kwathanirmanvidhi:** *Kwatha* is nothing but the aqueous extract of the herb being used. The *Kwath* was prepared freshly every time as per procedure described in *Sharangdhara samhita*.<sup>[9]</sup>

1. All raw materials purchased from authentic centre.
2. All drugs of study were taken in equal quantities totaling to 12.5 gms

effect of therapy on the disease. ‘*Bahushodrishtakarmata*’ (repeated practice observations) was mentioned as an essential quality of *Vaidya* by *Charak* (Ch.Su.9.6). So, from that we can say, importance of clinical work was known to the Acharyas from every beginning. Clinical trial is a carefully and ethically designed experiment with an aim to answer precisely framed question. It is a mean to evaluate the efficacy and tolerability of a treatment in human beings.

**MATERIALS :**

(1*Karsha*). A clean vessel was taken and this *bharad* was put in it and 16 times of water (200 ml) was added to it. Without covering the vessel, it was boiled on *mandagni* until it reduced to 1/8<sup>th</sup> (25 ml). Then the above prepared *kwath* was filtered in a clean vessel. Thus, the *Rasnapanchaka kwath* was prepared.

<b>Dose</b>	<b>: 25 ml BD</b>
<b>Prakshep</b>	<b>: KoshnaTila Tail (3 ml)</b>
<b>AushadhiSevanKaal</b>	<b>: Adhobhakta</b>
<b>Route of Administration</b>	<b>: Orally</b>
<b>Follow up</b>	<b>: after every week</b>
<b>Duration</b>	<b>: 4 weeks</b>

The course powder of *Rasnapanchaka kwatha* dravyas was provided to patient and explained the procedure of preparation of *Kwatha* to take it at home in decided dose and advised to consult if any adverse effect occurs.

**Standardization and authentication for Drug:** Before providing the Course powder

of *Rasnapanchaka kwatha* to patient, the raw drugs were made available from ISO 9001:2008 Certified Company; *kwatha* was prepared with afore mentioned method & send to laboratory for phyto-chemical analysis & quality assurance & after reporting it was used for study.

**TABLE NO-2:** Showing result of analysis of drug -

Name of test	<i>Rasnapanchaka kwatha</i>
p <sup>H</sup>	5.73
T.L.C.	Visible light: Rf-0.27,0.35,0.40,0.44,0.53,0.61
	UV(254nm): Rf-0.27,0.40,0.44,0.52,0.59
	UV(365): Rf-0.29,0.36,0.39,0.47,0.55
	Iodine Vap: Rf-0.36,0.40,0.60

#### METHODS

- **Center of Study :** Ayurved Rugnalaya attached to college
- **Method of Sampling:** Simple Randomized
- **Study Design :** Prospective Open Non-comparative
- **Source of data:** Total 30 patients were selected randomly from OPD & IPD units. Clinical trial was carried out on patients suffering from *Sandhigata vata*. These data were subjected to statistical analytical methods and on the basis of which a conclusion was drawn, specifying the efficiency of '*Rasnapanchaka kwatha*' under trial.

**Consent:** An informed written consent of all patients was taken before treatment starts.

#### CRITERIA FOR SELECTION OF PATIENT

1. Patients of age group 25-70 of both sexes, irrespective of religion, occupation and socio-economical status was selected.
2. Patients representing sign and symptoms of '*Sandhigata vata*'.
3. Patients willing to participate in the study were selected explaining them details about study.

#### CRITERIA FOR REJECTION OF PATIENT

1. Patients belonging to age group below 25 and above 70 years.
2. Patients with any complications.

#### CRITERIA FOR THE ASSESSMENT

**a) SUBJECTIVE PARAMETERS:** Patient was diagnosed on the basis of *Sandhigata vata lakshanani* as described in Ayurveda classics.<sup>[10]</sup>

1. *Shula*
2. *Shotha*

3. *Prasaranaakunchanasavedana*

4. *Sandhisphutana*

b) **OBJECTIVE**

**PARAMETERS:**ROM- Range of Motion

**Goniometric Examination:**The patient was first educated about the examination and was asked to lie in supine position with both the legs flat on the table exposing the legs as far as possible. The fulcrum of the Goniometer was aligned with the lateral epicondyle of the femur. The stationary arm was placed in line with the greater trochanter and midline of the fe-

**Score will be given as follow:**

	0	1	2	3
<i>Shula</i>	Absent	Mild (nagging, annoying, interfering little with ADLs*	Moderate (interferes significantly with ADLs)	Severe (disabling unable to perform ADLs)
<i>Shotha</i>	Absent	Slight more with comparison to normal	Much elevated joint seems grossly deformed	Much elevated joint seems grossly deformed
<i>Prasaranaakunchanasavedana</i>	Absent	Without wincing of face	With wincing of face	Shout or prevent complete movement
<i>Sandhisphutana</i>	No	Palpable	Audible	Clearly audible
ROM	135 <sup>0</sup> -115 <sup>0</sup>	115 <sup>0</sup> -105 <sup>0</sup>	105 <sup>0</sup> -95 <sup>0</sup>	95 <sup>0</sup> -85 <sup>0</sup>

\*Activities of daily living

**TOTAL EFFECT OF THERAPY**

Excellent results	Relief in Lakshanas above 70%
Moderate results	Relief in Lakshanas between 30% to 70%.
Poor results	Relief in Lakshanas below 30% or no change in lakshanas.

Thus, the effect of the treatment on different signs and symptom were analyzed statistically.

**OBSERVATIONS AND RESULT:**

**Distribution of patients according to sex** Out of 30 patients 11 i.e. (37%) patients were male and 19 i.e. (63%) were female. Thus, we may say that this disease is more prevalent in female.

**Distribution of patients according to age in years:** Out of 30 patients 7 i.e. (23%) patients were from 25-40 yrs., 23 i.e. (77%) patients were from 41-70 yrs.

mur. The moving arm was placed in line with the lateral malleolus and midline of fibula. Then the patient was asked to bend the knee as far as they can. The angle created was noted and recorded.

**CRITERIA FOR ASSESSMENT OF RESULT:**

The efficacy of therapy will be assessed on the basis of

- Subjective parameters before & after treatment
- objective parameters before & after treatment

**Distribution of patients according to religion:** In the present study maximum patients i.e. 21 (70%) were from Hindu community, 6(20%) were from Muslim community while 3 (10%) patients were belongs to other community.

**Distribution of patients according to occupation:** In the present study, maximum number of patients were housewives i.e. 11 (37%), 11(37%) patients were servants, 07

(23%) patients were worker and 01 i.e. (3%) patients were businessman.

**Distribution of patients according to marital status:** In this study, out 30 patients 26 (87%) patients were married and 4 (13%) patients were unmarried.

**Distribution of patients according to Education status:** Out of 30 patients 15(50%) patients were educated and 15(50%) patients were non-educated.

**Distribution of patients according to socioeconomic status:** In the present study, maximum patients i.e. 16 (73.33%) were middle economical state. 11 (16.33%) patients were from poor economical state and 3 (10%) patients were from rich economical state.

**Distribution of patients according to Agni:** In the present study, i.e. 11 (37%) patients had *Mandagni*, 13(43%) patients had *Vishamagni*, 5(17%) patient had *Tikshnagni*, and 1 (3%) patient had *Samagni*.

**Koshtha wise distribution of patients:** In the present study, most patients i.e. 15 (50%) had *Krura Koshtha*, 10(33%) patients had *Madhyama Koshtha*, 5(17%) patient had *Mrudu Koshtha*.

**Addiction wise distribution of patients:** In this present study, 15 (50%) patients were addicted to Tea, 02 (7%) patients were addicted to Tobacco, 08(27%) patient was addicted to Alcohol, 03(10%) patients were addicted to Smoking, 2 (6%) patients were addicted to coffee.

**Distribution of patients according to Diet status:** Out of 30 selected patients, 9(30%) patients taking vegetarian food and 21(70%) patients were taking mixed food.

#### STATISTICAL ANALYSIS:

Aim of this clinical trial is to see the “Clinical study of *Rasnapanchaka kwath* in *Sandhigata vata*”. *Sandhigata vata* is diagnosed by the group of the symptoms, as mentioned in *Samhita*. There are total five symptoms of *Sandhigata vata* taken by me for this clinical trial. For statistical analysis Wilcoxon Signed Rank Test is used for Subjective criteria.

The Wilcoxon Signed Rank Test is a non-parametric statistical hypothesis test can be used as an alternative to the paired student’s t-test, t-test for matched pairs, or the t-test for dependent samples when the population cannot be assumed to be normally distributed. All the symptoms were graded before and after the treatment, as described under the heading of criteria of assessment. As these symptoms were subjective in nature and hence were graded to evaluate the effect. Therefore effect of therapy in the group was statistically evaluated by non- parametric test as the graded data do not follow the normal distribution. It is a pre-requisite of parametric test that data must be quantitative, must follow normal distribution and sample should be selected by random method. Therefore these data of the said group were analyzed by using Wilcoxon Ranked Sign Test.

**Table no 3: Table Showing Effect of Therapy on Symptoms of 30 Patients of *Sandhigata vata* by Wilcoxon- Singed Rank Test**

Sr. No	Symptom	W	Median	Mean ± SD		SD	Z	P
				BT	AT			
1	<i>Shula</i>	465	2	3.56+1.07	0.86+0.81	48.62	4.771	<0.0001
2	<i>Shotha</i>	351	2	2.3+1.02	0.60+0.62	48.62	2.426	<0.0001

3	Prasaranaaakunchanasavedana	406	2	2.36+1.06	0.73+0.86	48.62	3.55	<0.0001
4	Sandhisphutana	300	1.5	2.03+1.37	0.66+0.80	48.62	1.378	<0.0001
5	ROM	325	1	1.60+0.56	0.43+0.67	48.62	1.892	<0.0001

$Z = [(T-m)-0.5] / SD$ ,  $SD = [n(n+1)(2n+1)]/24$ ,  $m = [n(n+1)]/4$ ,  $W$ =sum of all rank,  $T+$ =sum of all positive rank,  $T-$ =sum of all negative rank

**Table no.4 Total Score of subjective parameters wise distribution of 30 patients of Sandhigata vata**

Symptom	W	Median	Mean ± SD		SD	% Relief	Wilcoxon signed Rank Test Z	P
			BT	AT				
<b>Total Score</b>	465	7	10.27+3.47	2.86+2.50	48.62	72.02%	4.77	<0.0001

A before treatment, the mean score of subjective parameters was found to be 10.27 and after treatment, mean score had reduced to 2.86 the difference between BT and AT was significant. Table shows that

Rasnapanchaka kwath provides significant relief (p<0.0001) 72.02% in Total effect of therapy. Total score of patients (Table no 24) to reduce the symptoms of Sandhigata vata.

**Total Score of objective parameters wise distribution of 30 patients of Sandhigata vata**

Objective Parameter	W	Median	Mean ± SD		SD	% Relief	Z	P
			BT	AT				
ROM	325	1	1.60+0.56	0.43+0.67	48.62	72.91%	1.892	<0.0001

A before treatment, the mean score of ROM was found to be 1.6 and after treatment, mean score had reduced to 0.43 the difference between BT and AT was

significant. Table shows that Rasnapanchaka kwath provides significant relief (p<0.0001) 72.91% in ROM.

**Table No.5 Total effect of therapy shows relief in lakshanas: -**

Sr.no	Lakshanas	Before Treatment	After Treatment	Relief	Relief in %
1	Shula	107	26	81	75.70%
2	Shotha	69	18	51	73.91%
3	Prasaranaaakunchanasavedana	71	22	49	69.01%
4	Sandhisphutana	61	20	41	67.21%
5	ROM	48	13	35	72.91%

**Table No.6 Total effect of all patient wise distribution of 30 patients of Sandhigata vata**

Overall Effect	No. of Patients
Excellent Result (>70%)	18
Moderate Result (30-70%)	12
Poor Result (<30% or no change)	0

Out of total 30 patients, the above distribution shows that, there were 18 patients got

excellent results, 12 patients got Moderate results and no patient has Poor result.

## DISCUSSION:

The clinical trial was conducted in 30 patients suffering from *Sandhigata vata* in Kayachikitsa department of our institute.

### Discussion about Clinical study:

*Sandhigata vata* is such a disease having its origin in *Pakvashaya* and seat in *Janu Sandhi*. In classics, *Sandhigata vata* is included under the heading of *Vatavyadhi* as a separate clinical entity. There is an important sign *prasarana aakunchana savedana*. Nowadays, this sign can be calculated as ROM. It plays a major role in assessment of effect of therapy as an objective parameter. There is no need to state that modern medical treatment has its own limitation in managing this type of disease. Modern medical treatment either conservative or surgical and is highly symptomatic and with troublesome side effects. This suggests special need of an ayurvedic management for this type of conditions. As the numbers of patients suffering from this disease are increasing day by day, Ayurvedic physician should also make effort continuously to find out effective remedy for the patients of *Sandhigata vata*. So, the drugs having *Vatahara*, *Shulahara* and *rasayana* properties may be very useful in the treatment of *Sandhigata vata*. Many research activities were done in field of *Sandhigata vata* with distinguished drug therapy. But every study showed some extent of relief without 100% results & suggest need to combine other regimens explained in Ayurved Classics with their drug therapy & as no clinical study was done with '*Rasnapanchaka kwatha*' having *Vatahara*, *shulahara* & *rasayana* property described by *Chakradatta*, a simple randomized study was designed to see efficacy of *Rasnapanchaka kwatha* orally.

### Discussion on mode of action of Rasnapanchaka kwatha:

As discussed in the literary review *Sandhigata vata* is one of the *Vatavyadhi*. The vitiation of *Vata Dosha* is occurred in two ways i.e. *Dhatukshayajanya* or *Margavarodhjanya*. Thus *Vatavyadhi* are of two types i.e. *Dhatukshayajanya* or *Margavarodhjanya*<sup>[11]</sup>; due to overexertion, stress, unhealthy food occurrence of *Dhatukshayajanya Sandhigata vata* is more. It is always associated with the *kaphakshya*, in which *Snehadi gunas* of *shleshaka kapha* are affected due to vitiated *Vata Dosha*. The *Hetu* like *Atishrama*, *Ruksha Annaseven*, *Atichankraman* (Excess of walking) etc causes<sup>[12]</sup> *dhatukshaya*. If we consider the modern pathogenesis parallel to Ayurvedic principle, one can easily understand the *samprapti* of *Sandhigata vata* & mode of action of *Rasnapanchaka kwatha*. The vitiation of *Vata* & it's *sthansanshraya* at *Janu sandhi* leads to loss of articular cartilage and periarticular bone remodeling leads to expression of signs & symptoms of *Sandhigata vata*. As articular cartilage provides a remarkably smooth bearing surface, necessary for effortless joint movement; loss of articular cartilage leads to stiffness, pain and further restricted ROM i.e. *shula*, *prasarana aakunchana savedana*. Synovitis causes edema means *shophya*. The ingredients of the *Rasnapanchaka kwatha* contain *Rasna* and *Erandamula*, which are *agraya* in *Vatavyadhi*. *Guduchi* and *Shunthi* take *gamitwa* towards *asthi-majja*. *Sneha* itself praised as choice of drug in pacification of *Vatavyadhi*<sup>[13]</sup>. *Taila* is indicated for *vatavyadhi* by *Acharya Charaka* in *Snehadhyaya* of *Sutrasthana*<sup>[14]</sup>. In *nirupstambhita vatavyadhi sneha* is recommended primarily i.e. '*aadosneheupacharet*'<sup>[15]</sup>. *Tila tail* has *madhura rasa*, *madhura vipaka*, *ushna virya* and *snigdha*, *sukshma*, *vyavayi*, *vataghna* properties<sup>[16]</sup>. It is *balya*. It



provides strength to deep seated *dhatu* due to *sukshma guna*, decreases the process of degeneration. Thus *Rasnapanchaka kwath* has *agnideepan*, *vatahara*, *anulomana*, *shulahara*, *shothahara* and *rasayana* properties, which leads to establishment of equilibrium state of *Doshas* & thus releasing the *lakshanas* of *Sandhigata vata*.

### CONCLUSION:

On the basis of study of Review of literature, observations noted during study, findings collected after clinical trial & the results obtained after statistical analysis the following conclusions are drawn.

1. *Sandhigata vata* is commonly seen in society as a prominent problem.
2. Though occurrence of *Sandhigata vata* is more in old age; no. of patients of middle age is also increasing.
3. Females are more affected by the disease *Sandhigata vata*.
4. Occurrence of *Sandhigata vata* is observed in both people consuming vegetarian mixed diet.
5. Persons taking *atimatra* of *Katu rasa*, spicy foods, *virodhiahara* (fast food) and irregular diet habit are observed more prone to this disease.
6. Regarding marital status, married females are more affected by the disease.
7. Most of patients who are suffering from *Sandhigata vata* are of *krura Koshtha* and *Vishamagni*.
8. Regarding the etiological factors the unhealthy diet, anxiety, lower socio-economic strata, Lack of knowledge about nutrition, tendencies of female of fasting are greatly responsible for developing the *Sandhigata vata*.
9. The nature of work & daily activity affects the prevalence of *Sandhigata vata*. The person doing standing work, Excess walking (Atichankramana), bike

riding (*sheeghrayan*), heavy work, obese are more prone to *Sandhigata vata*.

10. It was clearly observed that, causative factors responsible for *Sandhigata vata*, should be avoided to get maximum results.
11. Occurrence of *dhatukshyayajanya Sandhigata vata* is more in *Jangala Desha*.
12. Trauma to knee joints plays a major role in formation of *Sandhigata vata*.
13. During clinical trial no known side effect was observed and thus it indicates the non-toxicity and safety of the drug.
14. In symptoms excellent results were observed in *Shula* and *Shotha*.
15. Thus we can say that *Rasnapanchaka kwatha* works excellent on *Sandhigata vata*.

From this study we conclude that the classical herbal trial of *Sandhigata vata* which helps to manage the disease process. This research will be a one of the evidences to support management of *Sandhigata vata* for ayurvedic practice.

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#### CORRESPONDING AUTHOR

**Vaidya. Patil Arati S.**

**P.G. (Scholar)**, Kaychikitsa Department, S.G.R. Ayurveda Mahavidyalaya, Solapur-413002 Maharashtra, India.

**Email:** aratipatil81@gmail.com

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