



A SURVEY AND CLINICAL STUDY ON THE ETIOLOGY OF *SWITRA* IN RELATION TO ITS DIAGNOSTIC APPROACH

[Srabani Das¹](#), [Apala Sengupta²](#)

¹Ph.D. Scholar, Professor, and H.O.D., Department of Roga Nidana and Vikriti Vigyana, Belley Sankarpur Rajib Gandhi Memorial Ayurvedic College and Hospital, Kushdanga, 24pgs(N), West Bengal, India.

² Professor and H.O.D, Department of Roga Nidana and Vikriti Vigyana, Institute of Post Graduate Ayurvedic Education and Research at Shyamadas Vaidya Shastra Pith Hospital, Kolkata, West Bengal, India.

Corresponding Author: drsabanidas@gmail.com

<https://doi.org/10.46607/iamj0510062022>

(Published Online: June 2022)

Open Access

© International Ayurvedic Medical Journal, India 2022

Article Received: 17/05/2022 - **Peer Reviewed:** 31/05/2022 - **Accepted for Publication:** 06/06/2022



ABSTRACT

According to *Ayurveda*, all skin diseases have been described under the heading of *Kustha*. Pigmentation disorder *Switra* fulfils the general criteria of *Kustha*, so it is considered under *Kustha*. In the treatise of *Ayurveda*, *Switra* is presented as a cutaneous pigmentation disorder, clinically characterized by white spots over the skin. Skin colour is reflected by melanin pigments of skin, functionally it is presented by *Bhrajaka Pitta* located in the *Twaka* (skin). Hypopigmentation does not affect the physical and intellectual capabilities of an individual but certainly inflicts tremendous emotional stress as the cosmetic value is a concern. Historical evidence of *Switra* is available from the *Vedic* period in *Atharva Veda*. Descriptive literary information about *Switra* is also available in *Charaka Samhita*, *Susruta Samhita*, *Astanga Hridaya*, and other major authentic classics of *Ayurveda*. The description of *Switra* found in *Ayurveda* is very much similar to that of Vitiligo in modern medicine. Vitiligo is described in modern medicine as an autoimmune disease. It is the most common pigmentation disorder that is characterized by a progressive loss of melanocytes from the epidermis; it manifests as white macules and /or patches on the skin and /or mucosa with or without the whitening of hair. Though many treatments are available in Modern medicine, most of those treatments are expensive; have serious adverse effects and so the output of the treatment is not satisfactory. In *Ayurveda*, different *Yogas* have been depicted either for external or internal use for the treatment of *Switra*. Proper knowledge about the disease is essential before the application of any medicine. This

survey and clinical study on the aetiology of *Switra* was planned to diagnose the disease and also achieve an effective and safe treatment.

Keywords - *Ayurveda, Switra, Vitiligo, Nidan, Hypopigmentation,*

INTRODUCTION

Switra is presented as a cutaneous pigmentation disorder, clinically characterized by white spots over the skin¹. According to *Ayurveda*, *Twak* (Skin) is considered to be the site of *BhrajkaPitta*, and this *Pitta* is responsible for the colour and complexion of skin². All skin diseases in *Ayurveda* have been described under the heading of *Kustha*. Pigmentation disorder *Switra* is also mentioned under the heading of *Kustha*, as it fulfils the general criteria of *Kustha*. Both *Kustha* and *Switra* are considered as *Raktaja-Vikara*. It causes tremendous emotional stress as the cosmetic value is a concern. *Switra* differs from other varieties of *Kustha* due to its non-secretory and non-infectious nature. The description of *Switra* found in *Ayurveda* is very much similar to that of Vitiligo mentioned in Modern medicine. Vitiligo is the most common pigmentation disorder that is characterized by a progressive loss of melanocytes from the epidermis and that manifests as white macules and /or patches on the skin and /or mucosa with or without the whitening of hair³. It occurs in about 1-2% of the world population⁴. Pigmentation is essential for maintaining body homeostasis because it provides photoprotection and participates in skin barrier function and antimicrobial defences of the skin. Vitiligo can be triggered by stress to the melanin pigment-producing cells of the skin, the melanocytes. The triggers, which range from sunburn to mechanical trauma and chemical exposures, ultimately cause an autoimmune response that targets melanocytes and causes progressive skin pigmentation disorders. Though the exact etiopathology of the disease is unknown, therefore it is a need to conduct various research on the disease *Switra*.

NIDANA

According to *Charaka Samhita*, *Vachansyaatathyani* (to tell lie), *Kritaghna bhava* (ungratefulness), *Nindasuranam* (abusing Gods), *Guru dharsana* (insulting teachers), *Papa karma* (sinful act), *Purvakrita karma* (sinful deeds of previous birth) and *Virodhi anna* (consumption of mutually contradictory food) are the causative factors of *Switra*⁵.

ViruddhaViryasana (When two *Dravyas* containing opposite *Virya* and taken as a diet in a combined form such as fish and Milk are taken together.); *Havisyan-na Bhojana* (Cooked rice and *ghee* are used as a diet, where this type of diet satisfies the requirement of carbohydrates but is devoid of Protein. Phenylalanine is necessary for the synthesis of melanin, and it is an amino acid in nature. So, protein deficiency is the suggested cause of defective melanization); *Dadhi atisevana* (It causes *Srotavisyandhi*); *Navanna, Kshira, Gura, Pistanna, Guru Dravya*, and *Dadhi* cause *Mamsavaha srotodusti*. The root of *Mamsavaha Srota* is *Tvaka*, so it causes cutaneous disorders such as *Switra*.; *Amla Dravya atisevana* (*Amla rasa* causes *Raktadusti* and *Switra* is a *Rakta pradusaja vikara*.); *Ati lavana-madhura-katu rasa sevena*.; *Ati santapa* (UV rays of sunlight enhanced melanogenesis. Melanin pigment protects skin from the harmful effect of UV rays, so skin disorders do not appear); *Chardivega dharana* (Suppression of vomiting).; *Ati-bhojana* (excess food intake) etc. are also included under *Nidanas* of *Switra*.

SAMPRAPTI

Switra is *Rakta Pradusaja Vikara*. Dietary and behavioural alteration vitiates the *Tridosha* and *Rakta* (mainly), after that *Twak, Mamsa*, and *Udaka* are also vitiated and creat *Switra*, but all signs and symptoms related to *Rakta* are not always manifested in *Switra*.

Table 1: BHEDA (Classification of Switra)

Name of Ayurvedic Texts	Type	Colour of Patches	Involved Dhātu
Charaka Samhita ⁶ 3 types	Daruna	Reddish	Rakta
	Charuna	Copper-coloured	Mamsa
	Kilasa	Whitish	Meda
Susruta Samhita ⁷ 3 types	Vataja	Aruna varna (Copper coloured)	Rakta
	Pittaja	Padma Patra varna (Colour of Lotus petal-Pink)	Mamsa
	Kaphaja	Sweta varna (Whitish/Pale)	Meda
Astanga Hridaya ⁸ 3 types	Vataja	Aruna varna	Rakta
	Pittaja	Copper coloured	Mamsa
	Kaphaja	Sweta varna	Meda

Table 2: RUPA (Clinical features)

Sl.No.	Rupa	Charaka Samhita ⁶	Susruta Samhita ⁷	Astanga Hridaya ⁹
Vata				
1.	Ruksa	-	-	+
2.	Aruna	-	+	+
3.	Raktasrita	+	-	+
4.	Mandalayukta	-	+	-
5.	Parusam	-	+	-
Pitta				
1.	Kamala patravata	-	+	+
2.	Dahayukta	-	+	+
3.	Tamra varna	+	-	+
4.	Roma nasaka	-	-	+
5.	Mamsasrita	+	-	+
Kapha				
1.	Sweta	+	+	+
2.	Snigdha	-	+	-
3.	Bahala	-	+	-
4.	Kanduyukta	-	+	+
5.	Medasrita	+	-	+

Sadhyasadyatwa¹⁰

A) According to Dosas-

- a) Vataja and Raktasrita Switra- Krichhrasadhya (difficult to cure)
- b) Pittaja and Mamsasrita Switra- Kriccratara (more difficult for treatment)
- c) Kaphaja and Medasrita Switra- Krichhratama (impossible to treat)

B) According To Clinical Features-

- a) When the patches are surrounded by non-reddish hairs or black hairs having thin and white lesions with recent onset, non-matted, and caused due to other than burn reasons are **curable**.
- b) If patches are very white, mutually matted together, having multiple lesions surrounded by red hairs with chronic duration, and if the lesions appearing in the palm, sole, genitalia, and lips are **incurable**.

Clinical Study

Clinical study has been carried out following a special methodology projected to multiple dimensions and observation guided by the review of relevant literature with reasonable discussion.

Materials And Methods

A) Selection of Patients -The study has been conducted on 35 patients after they fulfilled the inclusion and exclusion criteria, providing written consent and clinically diagnosed cases of *Switra* in the O.P.D. and I.P.D. of the Institute of Post Graduate Ayurvedic Education & Research at Shyamadas Vaidya Shastra Pith, West Bengal, Kolkata irrespective to patient's sex, age, religion, communities, and economic status, under strict protocol as per necessary formalities. A detailed history was taken in a specially designed proforma, and other necessary examinations and investigations were done. Diagnosis has been done based on clinical parameters mentioned in Ayurvedic & modern texts. Data are collected and statistically analyzed.

B) Diagnosis-Diagnosis of *Switra* is done by thorough skin examinations by evaluation of color, morphology, and distribution of lesion as depicted in the classical text. Western Parameters like Stool for OPC and Blood Sugar are investigated to search out some associated disorders. Detail etiopathological survey is done on the selected patients.

C) Duration of Study-6 months.

D) Interpretation and Results-Suggestive interpretations of the results in selected cases are presented with statistical analysis.

E) Assessment Criteria-

a) Inclusion Criteria- 1. Patients were suffering from *Switra* (Vitiligo). 2. Age between 10 to 60 years. 3. Patients who are willing to participate in the study.

b) Exclusion Criteria-1. Patients with any other hypopigmentation disorder of the skin other than Vitiligo. 2. Age below 10 years and above 60 years. 3. Patients with any chronic disease that needs regular medication. 4. Patients who were not willing to participate in the study.

RESULTS AND OBSERVATION

In this study, 35 cases of clinically diagnosed *Switra* were taken. General data taken for the study were presented in tabular form. In this survey study out of 35 patients, a maximum number of patients (37.14%) were found in the age group of 17-30 years, Male (57.14%) were more affected than female patients. 85.71% of patients were Hindu. It was observed that 31.43% of patients were students and a maximum number of affected persons were highly educated (51.43%). It was observed that married people (51.43%) were more affected than unmarried people, unemployed people occupied the highest incidence (48.57%), and the maximum duration of illness was (1-2) years in the selected sample. It was also observed that the maximum number of affected patients (65.71%) show evidence of familial inheritance, *Krishna*-coloured patients were largely affected (60.00%) by *Switra*, 100% of patients of the sample exhibited depigmented lesions and among the chromic variation (71.43%) patients occupy *Tamra varna Switra*. The given data reveals that patients having lots of lesions (i.e., *Vahu*) throughout the body were maximum in number (68.57%) and the size of the lesion was >2cm (82.86%). The patient having a non-discharging condition (i.e., *Aparisravi*) occupies the maximum number (100%) in the observed cases. Patients exhibit distribution of lesions in the palm at the highest rate (45.71%). Involvement of face (42.86%), chest (37.14%), neck (34.29%), sole (31.43%) and in lips-hand-knee-digits (28.57%). Evidence of normally pigmented hair is observed in (82.86%) of patients, a maximum number (91.43%) of patients showed no evidence of trauma, and a maximum percentage (71.43%) were showing predominance of the *Pitta dosa* in consideration of morphological characteristics of the lesion.

In the case of *Aharaja nidanas*, it was observed that a maximum number of patients (91.43%) were habituated to the excessive taking of fish and *amla dravya*. The next group (85.71%) presents the history of *Viruddhviriyasana* – *Kshira sevana-Dadhi sevana*, (60.00%) *Lavana sevana*, 57.14%) *Pistanna sevana*,

(48.57%) *Mulaka sevana* and (42.86%) *Madhu and Guda*.

Among *Viharaja nidanas*, (71.42%) of the patient's present history of *Diva nidra*, (42.86%) *Mutra ve-gadharana*, (34.29%) *Purisavega dharana* and (28.57%) of patients were the history of "*sahasas-itaudakamavataratasantapaupahata*".

In only a few numbers of patients, Post Prandial Blood Sugar is present but in 85.71% of patients, it was absent. It was observed that only a few patients showed evidence of *Entamoeba histolytica* in stool, but in the maximum 97.14% of patients, it was absent.

Table 3: Shows a general study on general data of *Switra* (N=35)

Sl. No.	General data	No. of Patients	Percentage (%)
1.	Age(17-30yrs)	13	37.14%
2.	Sex (Male)	20	57.14%
3.	Religion (Hindu)	30	85.71%
4.	Occupation (Student)	11	31.43%
5.	Educational Status (Higher Education)	18	51.43%
6.	Marital Status (Married)	18	51.43%
7.	Socio-economic Status (Unemployed)	17	48.57%
8.	Duration of Illness(1-2yrs)	11	31.43%
9.	Heredo-familial aspect (Nil)	23	65.71%
10.	Colour of the skin (Krishna)	21	60.00%
11.	Colour of the lesion (Depigmented)	35	100%
12.	Chromic variation of the depigmented area (Tamra)	25	71.43%
13.	Number of the lesion (Vahu)	24	68.57%
14.	Size of Lesion (>2cm)	29	82.86%
15.	Condition of the area (Aparisravi)	35	100%
16.	Area of localization of the lesion		
	Palm	16	45.71%
	Face	15	42.86%
	Chest	13	37.14%
	Neck	12	34.29%
	Sole	11	31.43%
	Lips-hand-knee-digits	10	28.57%
17.	Condition of hair over the lesion (Normal)	29	82.86%
18.	History of Trauma (Absent)	32	91.43%
19.	Dosic predominance (Pittaja)	25	71.43%

Table 4: Shows *AharajaNidanas* in Ayurved parlance of the patients of *Switra* (N=35)

Sl. No.	<i>AharajaNidanas</i>	No. of Patients	Percentage (%)
1.	<i>Viruddhaviryasana</i>	30	85.71%
2.	<i>Matsya</i>	32	91.43%
3.	<i>Kshira</i>	30	85.71%
4.	<i>Dadhi</i>	30	85.71%
5.	<i>Amla</i>	32	91.43%
6.	<i>Lavana</i>	21	60.00%
7.	<i>Pistanna</i>	20	57.14%
8.	<i>Mulaka</i>	17	48.57%

9.	Madhu	15	42.86%
10.	Guda	15	42.86%

Table 5: Shows Viharaja Nidanas in Ayurved parlance of the patients of Switra (N=35)

Sl. No	Viharaja nidana	No. of Patients	Percentage (%)
1.	Divanidra	25	71.42%
2.	Mutra vega dharana	15	42.86%
3.	Purisavega dharana	12	34.29%
4.	SahasasitaudakamavatarataSantapaupahata	10	28.57%

Table 6: Shows Laboratory Investigation of the patients of Switra (N=35)

Sl. No	Laboratory Investigation	No. of Patients	Percentage (%)
1.	Post-Prandial Blood Sugar (Absent)	30	85.71%
2.	Stool for O.P.C.(Absent)	34	97.14%

DISCUSSION

Age: According to the textual information all ages are susceptible to the disease, but in this study, the maximum number of patients were young aged (17-30 years) and were included in the maximum number (37.14%). Thus, the highest incidences occur in favour of this group when there are *Pitta pradhanya* in *Yuvavastha* and *Switra* is a *Pitta pradhana tridosajavyadhi*. **Sex:** In this study, 57.14% of patients were male and they were more in number. The male subject leads stressful life and irregular diet habits out of economical compulsion. So, they are susceptible to acquiring *Switra*. **Religion:** In this study majority of patients were Hindu (85.71%) followed by Muslims. Though there is no such religious significance of *Switra* in this small sample of the present study, because the Hindus are included in large numbers, Hindu predominance is reflected. **Occupation:** In this present study, the maximum number of patients, i.e., 31.43% was a student. It is difficult to establish any relationship between *Switra* and occupation. It may be due to the critical lifestyle in the recent era, students of adolescence are exposed to emotional stress and strain which are regarded as one of the probable etiological factors to initiate autonomic imbalance to affect melanin synthesis in the epidermis. **Educational status:** The obtained data shows that the maximum number of affected persons is highly educated (51.43%). Highly educated people do not have to endure stressful conditions. Stress is responsible for

triggering the autonomic imbalance to evoke defective melanin synthesis. **Marital status:** In this study, it is observed that married people (51.43%) were almost the same affected as unmarried people. The study reveals no relationship in the occurrence of the disease between married and unmarried persons. **Socioeconomic Status:** The unemployed person occupies the highest incidence (48.57%). This may be assumed that the unemployed person prefers Govt. hospitals for treatment in comparison to expensive private hospitals. Systemic rhythms of life are quite disrupted in the unemployed person; thus, they are completed to achieve irregular diet and daily practice and they also suffer from continuous stress. Collectively these are determined the aetiology of skin disease. **Duration of illness:** It was observed that the maximum duration of illness is (1-2) years, (31.43%) in the selected sample. In classical texts, it is mentioned that *Kustha* is a disease of extremely long duration. *Switra* and *Kustha* are clinically similar in various dimensions. The patients are more conscious of illness having a short duration. Therefore, this group exhibits a maximum number in the sample. **Familial inheritance:** It is observed that the maximum number of affected patients (65.71%) show no evidence of familial inheritance. As per textual information, it is stated that *Switra* is a *Kulaja Vyadhi*. Skin is derived from *Matrija bhava* and variation of complexion depends on *Atmaja bhava*. Thus, in the obtained data in a maximum patient, there is no history of inheritance from either side, and there is a chance of derangement of either factor among the

six responsible factors of conception. **Colour of the Skin:** The obtained data present that the *Krishna varna* patients are largely affected (60.00%) by *Switra*. As per textual information, the people of tropical countries show a higher incidence of Vitiligo. The patients included in this study belong to the temperate region. Thus, the incidence of Krishna people at the highest rate is significant. **Colour of the lesion:** 100% of patients in the sample exhibit depigmented lesions. As depigmentation is the identifying morphological characteristic of *Switra*, thus in every patient depigmentation is clinically significant. **Chromic variation of the depigmented area:** It is observed that among the chromic variation (71.43%) patients occupy *Tamra varna Switra*. It indicates *Paittika's* predominance and involvement of *Mamsa Dhatu*. This is further verified by the survey of *Nidanas*. **The number of lesion-** Patients having lots of lesions (i.e., *Vahu*) throughout the body is the maximum number (68.57%). *Vahu* is a characteristic feature of lesion *Switra* thus in a maximum patient it is significant. On the other hand, this specific clinical criterion denotes that the maximum patient of the sample is *Asadhya* (i.e., incurable). **Size of lesion:** The maximum number of patients having a size of lesion > 2cm (82.86%). the typical identifying character of the lesion of *Switra* is macule. In chronic cases, macular lesion units form a patch (diameter > 2cm). In the study sample, both these types are distinguishable, which confirms *Switra* in the selected patients. **Condition of the area:** The patient having a non-discharging condition (i.e., *Aparisravi*) occupies the maximum number (100%) in the observed cases. It signifies that the selected cases are having *Switra*. **Area of localization of the lesion:** Patients exhibit a distribution of lesions in the Palm at the highest rate (i.e., 45.71%). Involvement of Face, Chest, Neck, Sole and Lips-hand-knee-digits are almost same statistically, i.e., 42.86%, 37.14%, 34.29%, 31.43% and respectively 28.57%. The distribution of lesions in lips, palms, and sole is a suggestive indication of *Asadhyatwa*. **Condition of hair over the lesion:** Evidence of normally pigmented hair is observed in (82.86%) of patients. It indicates *Sadhyata* of *Switra*, and patients with depigmented hair indicate *Asadhyata* of

Switra. **History of Trauma:** In this study, it is observed that a maximum number of patients (91.43%) showed no evidence of trauma. Traumatic history especially *Agnidahana* (Burn) is a bad prognostic sign of *Switra*. So, the majority of patients are showing a good prognosis about this feature only. **Dosic predominance:** The maximum percentage i.e. (71.43%) is showing predominance of the Pitta dosa in consideration of morphological characteristics of the lesion. **Aharaja Nidanas:** It is observed that the maximum no. of patients (91.43%) was habituated to excessive intake of fish and *Amla Dravya*. The next group (85.71%) presents the history of *Viruddhaviryasana*, *Kshira sevana* with *anna*, *Dadhi sevana* with *anna*, excessive intaking of *Dadhi* and *Anna* (71.42%) of the patient's present history of *Divanidra*. *Amlarasa* vitiates rakta. *Switra* is a *Rakta pradusaja vikara*, so excessive intake of *Amla Rasa* as a determined etiological factor of *Switra* is significant in the study sample. *Viruddhaviryasana* i.e., simultaneous ingestion of *Matsya* and *Kshira* vitiates *Rakta* as they contain opposite qualities of *Virya*. Hence the continuous practise of this type of diet may lead to *Switra*. In taking of a contra indicatory combination of *dadhi* leads to *Srotaabhishyandi* and initiates *Kustha roga*. *Diva Nidra* except in summer vitiates *Pitta* and *Slesma*, hence promoting dosic aggravation in the pathogenesis of *Switra*. **Viharaja nidanas:** A maximum number of patients (42.86%) were habituated in *Mutra vega dharana* and 34.29% are habituated in *Purisa vega dharana*. Other *Viharaja nidanas* are not statistically satisfied. **Post-Prandial Blood Sugar:** In only 14.29% of the patients Post Prandial Blood Sugar is present, but in 85.71% of the patients, it is absent. The dietary aetiology of *Prameha* and *Kustha* are the same. Moreover, in Diabetes mellitus, Vitiligo is an associated complaint. Thus, in selected patients of *Switra*, Post Prandial Blood Sugar was measured in search of diabetes mellitus or hyperglycemia. **Stool for O.P.C.:** Only 02.86% of patients were showing evidence of *Entamoeba histolytica* in the stool. But in the maximum 97.14% of the patient, it is absent. The obtained data reveal that in the present study sample,

the role of *Entamoeba histolytica* is not occupying an important part.

CONCLUSION

Results of the present study suggested that our observations are essentially consistent with the literature. *Switra* is a non-infectious skin disease that has been observed since ancient times. *Switra* was described along with *Kustha* but did not include in the 18 types of *Kustha*. According to Ayurveda, this is a disorder involving the '*Bhrajaka Pitta*' of the skin. *Switra* may correlate to Vitiligo due to their similar clinical presentation. Vitiligo is a pigmentary disorder of the skin characterized by partial or complete hypomelanogenic dysfunction expressed locally or generally by depigmented macules. In the primary stages, the abnormal colour of the lesion is expressed as per the involvement of *Dosa*, but in the chronic stage, it depends on the affliction of succeeding *Dhatu*. The course of *Switra* covers a very long duration. *Switra* is *Rakta Pradusaja Vikara*. The young age group, male subjects, students, Hindus, intellectuals, married individuals, and unemployed group show the highest incidence. Heredo-familial aspects of *Switra* are non-significant. People of darker skin colour show the highest evidence. The occurrence of the *Tamra varna* lesion is highest in the sample. The shape of the lesion in all patients has a convex border with a size >2cm. The distribution of lesions in the palm & face occurs at a higher rate. Ingestion of combined fish and milk, and intake of curd, milk, and sour food show the highest occurrence in the study sample. So, ViruddhaViryasana, Matsyasevana, and Atimatram Amla-Dadhi-Kshira sevana are the suggestive Nidan of *Switra*. Findings of *Entamoeba histolytica* in stool and post-Prandial Blood Sugar in blood show negative results.

REFERENCE

1. Acharya Dalhana, NibandhaSamgraha, Commentary on Susruta Samhita, edited by YadavjiTrikamji Acharya, Nidansthana, Chapter-5, Verse-17, Chowkhamba Orientation, Varanasi, 1980,4th Edition,
2. AcharyaY.Trikamji, Charaka Samhita by Agnivesa, revised by Charaka and Dridhabala, SutraSthana, Chapter12, Verse11, Surabharati Prakashan, Varanasi,1992.
3. Taieb AV, Alomar A, Böhm M, Dell'Anna ML, De Pase A, Eleftheriadou V, et al. Guidelines for the man-

agement of vitiligo: The European Dermatology Forum consensus. Br J Dermatol 2013; 168:5-19.

4. Khanna, N., Dermatology and Sexually Transmitted Disease, Page-100.
5. Acharya y. Trikamji, Charaka Samhita by Agnivesa, revised by Charaka and Dridhabala, Chikitsa Sthana, Chapter7, Verse177, Surabharati Prakashan, Varanasi,1992.
6. Agnivesha, Charaka Samhita, Ayurveda Deepika Commentary of Chakrapani, edited by: Vaidya YadavjiTrikamji Acharya, Chikitsa sthana, Chapter-7, Verse-173-176, Choukambha Surabharati Prakashan, Varanasi, year of reprint-2011, Page-452.
7. Sushruta. Susruta Samhita, edited with AyurvedaTattva-Sandipika Hindi commentary by KavirajaAmbhikautta Shastri, Volume 1, Nidanasthana, Chapter 5, Verse-17, Chaukhambha Sanskrit Sansthan, Varanasi, Page-286.
8. Gupta Atrideva, Vidyotini Hindi Commentary on AstangaHridaya, edited by UpadhyayaYadunabdana, Sutra Sthana, Chapter-12, Verse-61, Chowklhamba Sanskrit Sansthan, Varanasi, ,1982,8th Edition.
9. Gupta Atrideva, Vidyotini Hindi Commentry on AstangaHridaya, edited by UpadhyayaYadunabdana, NidanSthana, Chapter-14, Verse-38-39. ChowklhambaSanskrit Sansthan, Varanasi, 1982,8thEdition.
10. Acharya y. Trikamji, Charaka Samhita by Agnivesa, revised by Charaka and Dridhabala, Chikitsa Sthana, Chapter-7, Verse-175-176, Surabharati Prakashan, Varanasi,1992.

Source of Support: Nil

Conflict of Interest: None Declared

How to cite this URL: Srabani Das & Apala Sengupta: A Survey and Clinical Study on The Etiology of Switra in Relation to Its Diagnostic Approach International Ayurvedic Medical Journal {online} 2022 {cited June 2022} Available from:
http://www.iamj.in/posts/images/upload/1420_1427.pdf