

# An Observational Study to Appraise *Kitibha Kushta Lakshana* in Psoriasis

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## ABSTRACT

Most of the skin disorders are incorporated under *Kushta* in *Ayurveda*. *Kitibha Kushta* is a *Kshudra Kushta* explained by various *Acharyas* (or various *Samhitas*) that is one among them. Psoriasis is a frequently encountered skin manifestation that has similarities with the manifestations of *Kitibha Kushta*. For a better clinical utility, a detailed analysis of various diagnostic features (*Lakshanas*) of *Kitibha Kushta* mentioned by different *Acharyas*, their comparison with two sub-types (plaque and guttate) of psoriasis, based on presenting symptomatology, clinical findings connected to integumentary system examination finds merit. In the present study, results obtained on analysis based on descriptive statistics (frequency) showed that in guttate psoriasis maximum *Lakshana* according to *Acharya Charaka* and *Ashtangahridaya* as well as *Samgraha* was present equally followed by *Acharya Bhela*. Similarly in plaque psoriasis maximum of *Kitibha Kushta Lakshana* mentioned according to *Acharya Charaka* followed by *Ashtangahridaya* and *Acharya Bhela* was observed. Therefore combining all the *Lakshana* mentioned by various *Samhita* provides better knowledge in understanding the *Lakshana* of *Kitibha Kushta* and aide diagnosis. On comparing the *Lakshana* of *Kitibha Kushta* mentioned by various *Acharyas* with different types of psoriasis by crosstab and Pearson's chi-square test and Spearman's correlation test, showed no statistical significance except for *Kitibha Kushta* mentioned by *Ashtangahridaya* and *Ashtangasangraha* with guttate psoriasis with P-value =0.019. Therefore based on statistical tests result, *Kitibha Kushta* mentioned by *Ashtangahridaya* and *Samgraha* can be probably compared and correlated to guttate psoriasis to a certain extent in the present study.

**Keywords:** *Kitibha Kushta*, *Lakshana*, Psoriasis

## INTRODUCTION

Skin diseases to varying extend contribute to physical as well as psychological and social impairment. In *Ayurveda*, *Kushta* portrays skin disorders. *Kitibha Kushta* is one among them. *Kitibha* is formed by two words, *Kiti* refers to a variety of insect having black color and *Bha* meaning resemblance. [1] According to Monnier Williams, *Kitibha* means lice or bug. *Vishishta Nidana*, *Poorvarupa* for *Kitibha Kushta* are not mentioned separately, therefore *Samanya Kushta*

*Nidana* [2] and *Samanaya Poorva Roopa* [3] have to be considered with merit.

Various *Samhita* (*Acharyas*) attribute various *Lakshana* for *Kitibha Kushta* (as mentioned in Table1). Psoriasis is an often encountered skin manifestation frequently compared with manifestations of *Kitibha Kushta*. Hence, an analysis of *Lakshanas* of *Kitibha Kushta* mentioned in various *Samhitas* (*Acharyas*) and their comparison with psoriasis and its subtypes finds merit for better clinical utility. Therefore an observational clinical study is undertaken to explore the association of

*Kitibha Kushta Lakshanas* mentioned in various *Samhitas* (*Acharyas*) with different subtypes of psoriasis, based on presenting symptomatology, clinical findings connected to integumentary system examination.

**Aims and Objectives**

To compare *Kitibha Kushta Lakshanas* mentioned in various *Samhitas* (*Acharyas*) with different subtypes of psoriasis.

**MATERIALS AND METHODS**

68 subjects irrespective of gender, caste, and religion and aged between 20-60 years, fulfilling diagnostic criteria were selected from the Outpatient and Inpatient Department of a tertiary hospital at Hassan. Subjects with Acute trauma, other major systemic illnesses, and other co-existing skin diseases such as urticaria and eczema that may interfere with the study were excluded.

The study commenced with the help of specially designed case proforma after

obtaining informed written consent from Subjects along with Institutional ethical committee clearance. The diagnosis was done based on signs and symptoms of psoriasis-like the presence of erythematous papules with or without the following: Dry, silvery scales, Itching sensation, and Redness. Further, these subjects were differentiated into groups based on the diagnosis of subtypes of psoriasis. Guttate psoriasis: patients with small scaly droplets like lesion over large areas. Pustular psoriasis: reddish tender lesion, non-infectious pus-filled blister, and raised lesion. Erythrodermic psoriasis: widespread, developed from other types of psoriasis with exfoliation of the skin. Plaque psoriasis: red patch with white scales on top, commonly occur at forearm, naval and scalp. Inverse psoriasis: red patch on skin fold and smooth inflamed skin. [4] Above subjects were assessed for the presence of *Kitibha Kushta Lakshanas* mentioned in various *Samhita* (*Acharyas*) (as mentioned in Table1)

**Table 1: Lakshana of Kitibha Kushta according to various Samhita (Acharya)**

Samhita (Ayurveda literature source)	Lakshana of Kitibha Kushta
Charaka samhita, [5] Bhavaprakasha, [6] Madhava nidana, [7] Vangasena, [8]	Shyavam (Greyish Discoloration)
	Kinakhara sparsha (Rough like a scar)
	Parusha (Roughness)
Sushruta Samhita [9]	Sraavi (Secretion)
	Ghana (Heaviness)
	Ugrakandu (Severe itching)
	Snigdha (Unctuous)
	Krishna varna (Blackish discoloration)
Ashtangahridaya and samgrha [10]	Kinakhara sparsha (Rough like a scar)
	Parusha (Roughness)
	Kanduyukta (Itching)
	Rooksha(Dry)
	Asita (Whitish)
Bhela Samhita [11]	Drudha (Firm)
	Prasravayukta (Secretion)
	Kanduyukta (Itching)

Based on the observations and result connected to signs and symptom of different types of psoriasis that is analogous to *Kitibha Kushta*, the conclusion is drawn.

**Statistical analysis:**

Data obtained from 68 patients completed the study were considered for statistical analysis and relevant observations and results were interpreted with descriptive statistics and crosstab with Pearson’s chi-square test and Spearman’s correlation using

SPSS (Statistical package for social sciences) version 23. Pearson’s chi-square test interpreted as, if P < 0.01 is considered as statistically highly significant, P < 0.05 - 0.01 is considered as statistically significant and P > 0.05 is considered as not significant. Further, Spearman’s correlation was performed, interpreted as, r value between 0.0 to ± 0.30 negligible correlation, low positive/negative correlation ±0.30 to ± 0.50. and ± 0.50 to ± 0.70 Moderate positive

/negative correlation,  $\pm 0.70$  to  $\pm 0.90$  highly positive/ negative correlation .  $\pm 0.90$  to  $\pm 1.0$  very highly positive /negative correlation and thereby conclusion was obtained.

## OBSERVATION AND RESULTS

The incidence of psoriasis was a maximum of 21(30.9%) in the age group 51-60years followed by 19(27.9%) between 21-30 years.

Gender wise distribution showed that majority were males 50(73.5%) followed by females 18(26.5%). In the present study among 68 subjects diagnosed with Psoriasis all 68(100%) presented with erythrodermic papule, 67(98.5%) with itching sensation, and dry silvery scales followed by 62(91.5%) with redness.

Diagnosis of Psoriasis is immensely contributed by clinical examination; hence a good understanding of integumentary system examination plays a vital role in the diagnosis. In the current study on 68 patients of Psoriasis subjected to examination revealed as follows: site of manifestation of the lesion, majority 47(69.1%) was generalized. Among the distribution of skin lesion, the majority 51(75%) of the lesion was symmetrical. Arrangement of skin lesion showed 48(70.6%) were coalescing arrangement followed by discrete 17(25%) arrangement. On palpation of lesion 63(92.6%) rough and 67(98.5%) firm. Evaluation of type of lesion showed maximum plaque 58(85.3%) type.

Examination of surface texture showed scaly 66(97.1%) type followed by excoriation 42(61.8%) was observed. The color of the lesion showed red 31(45.6%) and blue-black 23(33.8%). Most of the Psoriasis lesion in the current study presented with irregular 51(75%) and poorly defined border 41(60.3%). The shape of the Psoriasis lesion was observed as irregular in 51(75%) followed by round 15(22.1%). Further 41(60.3%) presented with a poorly defined border and 27(39.7%) presented with a well-defined border. In the present study comprising 68 patients of Psoriasis, 67(98.5%) presented with positive candle grease test and 64(94.1%) with positive auspits sign, 40(58.8%) with positive scratch test and 9(13.2%) with positive koebners phenomenon. Among 68 patients maximum, 40 (58.8%) presented with plaque-type of Psoriasis followed by 28(41.2%) with the guttate type of Psoriasis. No cases of pustular Psoriasis, erythrodermic Psoriasis, and inverse Psoriasis reported during the entire course of study.

In the current study with 68 diagnosed subjects of psoriasis, *Kitibha Kushta Lakshana* as mentioned in *Charaka Samhita*, *Sushruta Samhita*, *Ashtangahridya* and *Bhela Samhita* was observed in 61, 9, 58, 24 subjects respectively, with details of the frequency of *Lakshana*, as mentioned by various *Acharya* is presented in Table number 2,3,4 and 5.

**Table 2: Distribution of Kitibha Kushta Lakshana according to Acharya Charaka among 68 patients of psoriasis**

Kitibha Kushta Lakshana according to Acharya Charaka	Patients of psoriasis N=68 with Kitibha Kushta Lakshana according to Acharya Charaka		Total N=68
	Present	Absent	
Shyava varna	19	49	68
Parusha	61	7	68
Kinakaraparasha	61	7	68

**Table 3: Distribution of Kitibha Kushta Lakshana according to Acharya Sushruta among 68 patients of psoriasis**

Kitibha Kushta Lakshana according to Acharya Sushruta	Patients of psoriasis N=68 with Kitibha Kushta Lakshana according to Acharya Sushruta		Total N=68
	Present	Absent	
Sraavi	3	65	68
Krishna varna	8	60	68
Snigdha	2	66	68
Ghana	7	61	68
Ugrakandu	9	59	68

**Table 4: Distribution of Kitibha Kushta Lakshana according to Astangahridaya among 68 patients of psoriasis**

Kitibha Kushta Lakshana according to Astangahridaya	Patients of psoriasis N=68 with Lakshanas of Kitibha Kushta according to Astangahridaya		Total N=68
	Present	Absent	
Kinakhara sparsha	57	11	68
Parusha	58	10	68
Rooksha	56	12	68
Asita	21	47	68

**Table 5: Distribution of Kitibha Kushta Lakshana According to Acharya Bhela among 68 patients of Psoriasis**

Kitibha Kushta Lakshana according to Acharya Bhela	Patients of psoriasis N=68 with Kitibha Kushta Lakshana according to Acharya Bhela		Total N=68
	Present	Absent	
Prasravayukta	6	62	68
Drudha	17	51	68
Samutpanna	3	65	68
Kandu	24	44	68

**Table 6: Showing distribution of Kitibha Kushta Lakshana according to various Acharyas (Samhita) with special reference to Guttate Psoriasis and Plaque Psoriasis (f - Frequency, %- Percentage)**

Authors	Lakshana	Guttate Psoriasis(N=28)						Plaque Psoriasis(N=40)					
		Present		Absent		Total		Present		Absent		Total	
		F	%	f	%	F	%	F	%	f	%	f	%
Acharya Charaka Madhava nidana Vangasena bhavaprakasha	Shyava varna Kinakhara sparsha Parusha	27	96.4	1	3.6	28	100	34	85	6	15	40	100
Acharya Susrutha	Sravi Krishna varna Snigdha Ghana Ugra kandu	6	21.4	22	78.6	28	100	3	7.5	37	92.5	40	100
Acharya Bhela	Drudha Samutpanna Prasravayukta Kanduyukta	10	35.7	18	64.3	28	100	14	35	26	65	40	100
Ashtangahridaya Ashtanga Samgraha	Kinakhara sparsha Parusha Kand yukta Rooksha Asita	27	96.4	1	3.6	28	100	31	77.5	9	22.5	40	100

In the present study out of 28 cases of Guttate Psoriasis, a maximum of 27 (96.4%) patients manifested with Lakshana of Kitibha Kushta mentioned by Astangahridaya, Ashtangasamgraha, Charaka, Madhava Nidana, Vangasena and Bhavaprakasha, followed by Lakshana according to Acharya Bhela 10(35.7%).

Among 40 cases of Plaque Psoriasis maximum of 34(85%) presented with Lakshana of Kitibha Kushta according to Acharya Charaka, Madhava Nidana, Vangasena and Bhavaprakasha, followed

by Lakshana according to Ashtangahridaya and samgraha 31(77.5%) patients.

Based on the manifestation of one or more Kitibha Kushta Lakshana according to each Acharya, patients were diagnosed with Kitibha Kushta separately under both guttate as well as plaque psoriasis. Further cross tab test along with Pearson chi-square and spearman's correlation was performed between patients diagnosed with Kitibha Kushta according to each Acharya and Guttate as well as Plaque psoriasis and the result is mentioned in Table 8.

**Table 7: Showing Cross tab result, Pearson chi-square test and Spearman's correlation between Guttate psoriasis and Kitibha Kushta according to Acharya Charaka (P-Present, A-Absent, T-Total)**

Kitibha Kushta according to Acharya Charaka		Cross tab test				Pearsons chi-square			Spearman's correlation	
Guttate psoriasis	present	Count	P	A	T	Chi value	PValue	S	Value	S
		Expected count	27	1	28					
Guttate psoriasis	Absent	Count	25.1	2.9	28	2.639	0.104	NS	0.185	0.131
		Expected count	34	6	40					
Guttate psoriasis	Total	Count	35.9	4.1	40	2.639	0.104	NS	0.185	0.131
		Expected count	61	7	68					
Guttate psoriasis	Total	Count	61	7	68	2.639	0.104	NS	0.185	0.131
		Expected count	61	7	68					

**Table 8: Showing Cross tab result, Pearson chi-square test and Spearman's correlation between Guttate psoriasis and Kitibha Kushta according to Acharya Sushruta (P-Present, A-Absent, T-Total)**

Kitibha Kushta according to Acharya Sushruta										
		Cross tab test			Pearsons chi-square			Spearman's correlation		
			P	A	T	Chi value	P value	S	Value	S
Guttate psoriasis	Present	Count	6	22	28	2.746	0.097	NS	0.202	0.98
		Expected count	3.7	24.3	28					
	Absent	Count	3	37	40					
		Expected count	5.3	34.7	40					
	Total	Count	9	59	68					
		Expected count	9	59	68					

**Table 9: Showing Cross tab result, Pearson chi-square test and Spearman's correlation between Guttate psoriasis and Kitibha Kushta according to Ashtangahridaya and samgraha (P-Present, A-Absent, T-Total)**

Kitibha Kushta according to Ashtangahridaya and samgraha										
		Cross tab test			Pearsons chi-square			Spearman's correlation		
			P	A	T	Chi value	Pvalue	S	Value	S
Guttate psoriasis	Present	Count	27	1	28	5.509	0.019	S	0.263	0.03
		Expected count	23.9	4.1	28					
	Absent	Count	31	9	40					
		Expected count	34.1	5.9	40					
	Total	Count	58	10	68					
		Expected count	58	10	68					

**Table 10: Showing Cross tab result, Pearson chi-square test and Spearman's correlation between Guttate psoriasis and Kitibha Kushta according to Acharya Bhela**

Kitibha Kushta according to Acharya Bhela										
		Cross tab test			Pearsons chi-square			Spearman's correlation		
			P	A	T	Chi value	Pvalue	S	Value	S
Guttate psoriasis	Present	Count	10	18	28	0.004	0.952	NS	0.007	0.953
		Expected count	9.9	18.1	28					
	Absent	Count	14	26	40					
		Expected count	14.1	25.9	40					
	Total	Count	24	44	68					
		Expected count	24	44	68					

**Table 11: Showing Cross tab result, Pearson chi-square test and Spearman's correlation between Plaque psoriasis and Kitibha Kushta according to Acharya Charaka**

Kitibha Kushta according to Acharya Charaka										
		Cross tab test			Pearsons chi-square			Spearman's correlation		
			P	A	T	Chi value	Pvalue	S	Value	S
Plaque psoriasis	present	Count	34	6	40	2.639	0.104	NS	-0.185	0.131
		Expected count	35.9	4.1	40					
	Absent	Count	27	1	28					
		Expected count	25.1	2.9	28					
	Total	Count	61	7	68					
		Expected count	61	7	68					

**Table 12: Showing Cross tab result, Pearson chi-square test and Spearman's correlation between Plaque psoriasis and Kitibha Kushta according to Acharya Sushruta**

Kitibha Kushta according to Acharya Sushruta										
		Cross tab test			Pearsons chi-square			Spearman's correlation		
			P	A	T	Chi value	Pvalue	S	Value	S
Plaque psoriasis	Present	Count	3	37	40	2.746	0.097	NS	-0.202	0.098
		Expected count	5.3	34.7	40					
	Absent	Count	6	22	28					
		Expected count	3.7	24.3	28					
	Total	Count	9	59	68					
		Expected count	9.0	59.0	68					

**Table 13: Showing Cross tab result, Pearson chi-square test and Spearman's correlation between Plaque psoriasis and Kitibha Kushta according to Ashtangahridaya and samgraha**

Kitibha Kushta according to Ashtangahridaya and samgraha										
		Cross tab test			Pearsons chi-square			Spearman's correlation		
			P	A	T	Chi value	Pvalue	S	Value	S
Plaque psoriasis	Present	Count	31	9	40	5.509	0.019	S	-0.263	0.030
		Expected count	34.1	5.9	40					
	Absent	Count	27	1	28					
		Expected count	23.9	4.1	28					
	Total	Count	58	10	68					
		Expected count	58	10	68					

**Table 14: Showing Cross tab result, Pearson chi-square test and Spearman's correlation between Plaque psoriasis and Kitibha Kushta according to Acharya Bhela**

		Cross tab test				Pearsons chi-square			Spearman's correlation	
		Count	P	A	T	Chi value	Pvalue	S	Value	S
Plaque psoriasis	Present	Count	14	26	40	0.004	0.952	NS	-0.007	0.953
		Expected count	14.1	25.9	40					
	Absent	Count	10	18	28					
		Expected count	9.9	18.1	28					
	Total	Count	24	44	68					
		Expected count	24	44	68					

## DISCUSSION

On comparison of *Kitibha Kushta* explained by various *Acharyas*, *Lakshanas* such as *Shyava Varna*, *Kinakhara Sparsha*, *Parusha*, *Rooksha*, *Ugra Kandu* and *Drudha* are similar to blue-black color, rough, Plaque, hyperkeratosis, itching, and small scaly lesion. Based on the frequency, above *Lakshana* was seen maximum in subjects and can be considered as essential characteristics in the diagnosis of *Kitibha Kushta*, though another *Lakshana* such as *Sraavi*, *Snigdha*, *Ghana*, *Samutpanna*, *Asita Varna* is also considered.

*Kitibha Kushta Lakshana* according to *Acharya Charaka* is an outlook that is based on the nature of the lesion. In the present study on 68 patients of Psoriasis, analysis based on descriptive statistics (frequency) showed that in Guttate Psoriasis maximum *Kitibha Kushta Lakshana* according to *Acharya Charaka* and *Ashtangahridaya* as well as *Samgraha* was present equally followed by *Acharya Bhela*, similarly in Plaque Psoriasis maximum of *Kitibha Kushta Lakshana* according to *Acharya Charaka* followed by *Acharya Ashtangahridaya* and then *Acharya Bhela* was observed compared to other *Acharyas*. *Kinakhara sparsha*, *parusha* were the *Lakshana* that was mentioned by both *Charaka* and *Ashtangahridaya*. *Charaka* adds *Shyava Varana* and *Ashtangahridaya* add *Kandu*, *Rooksha*, *Asita Varna* with above two *Lakshana*. *Lakshana* mentioned by *Acharya Bhela* are generalized and hence observed very less frequently less compared to *Lakshana* according to *Charaka* and *Ashtanga Hridaya*.

Guttate Psoriasis with droplet alike lesion and small scaly lesion as well as

symptoms of Plaque Psoriasis such as red patch with white scales on top and spread to the forearm, the scalp can be considered under the umbrella of *Kinakhara Sparsha* and *Parusha Twak* of *Kitibha Kushta*. *Acharya Charaka* and *Ashtangahridaya* have a difference of opinion about the color of *Kitibha Kushta* as *Shyava Varna* and *Asita Varna* respectively.

To confirm the correlation and comparison of *Kitibha Kushta Lakshanas* according to various *Acharya* with Guttate and Plaque Psoriasis presentation, crosstab analysis followed by Pearson's chi-square test and spearman's correlation was performed. The results indicated that based on present study *Kitibha Kushta Lakshanas* according to *Acharya Charaka* as well as *Sushruta* cannot be compared and correlated with Guttate Psoriasis, as cross tab analysis showed that, though the observed count of both was more than the expected count in a diagnosed case of Guttate Psoriasis with the P-Value obtained by Pearson chi-square showed 0.014 and 0.097 respectively. As P-Value >0.05, that is not statistically significant. The confirmation of this result by spearman's correlation also showed that r value = 0.185 and 0.202 correspondingly indicated a negligible correlation between *Kitibha Kushta Lakshana* mentioned according to *Acharya Charaka* and *Sushruta* with Guttate Psoriasis

Similarly on analysis of correlation of *Kitibha Kushta Lakshanas* according to *Acharya Bhela* with Guttate Psoriasis showed that observed count of the presence of *Kitibha Kushta Lakshanas* mentioned according to *Acharya Bhela* in diagnosed Guttate Psoriasis cases was almost equal to expected count, further Pearson chi-square

test gave P-Value of 0.95 that is  $>0.05$  and spearman's correlation gave r value 0.007 indicating a negligible correlation between *Kitibha Kushta Lakshanas* according to *Acharya Bhela* with Guttate Psoriasis. The association is statistically not significant in the present study and both of the above cannot be compared and correlated as per outcome in the current study.

Cross tab analysis of *Kitibha Kushta Lakshanas* according to *Ashtangahridaya* with Guttate Psoriasis showed that the observed count of *Kitibha Kushta Lakshanas* according to *Ashtangahridaya* and *samgraha* in a diagnosed case of Guttate Psoriasis was more than the expected count and the Pearson's chi-square gave P-Value of 0.019 that is  $<0.05$  which indicate it is statistically significant. Further spearman's correlation resulted in an r-value 0.263 that showed negligible correlation exists between *Kitibha Kushta Lakshanas* mentioned according to *Ashtangahridaya* and *samgraha* with Guttate Psoriasis in the present study. Hence based on the current study *Kitibha Kushta Lakshanas* according to various *Acharyas* cannot be correlated to Guttate Psoriasis except *Kitibha Kushta Lakshanas* explained according to *Ashtangahridaya* and *samgraha*.

The crosstab test result of *Kitibha Kushta Lakshanas* by various *Acharyas* with Plaque Psoriasis showed that observed count of *Kitibha Kushta Lakshanas* according to *Acharya Charaka*, as well as *Sushruta*, was less than the expected count among the diagnosed case of Plaque Psoriasis, also the p-value obtained by Pearson's chi-square test was  $>0.05$  indicating they are not statistically significant, further spearman's correlation showed that r-value indicating barely negligible correlation exists between *Kitibha Kushta* explained according to *Acharya Charaka* and *Sushruta* with Plaque Psoriasis.

Cross tab analysis of *Kitibha Kushta Lakshana* mentioned by *Acharya Bhela* with Plaque Psoriasis showed that observed count of *Lakshana* of *Kitibha Kushta*

according to *Acharya Bhela* in a diagnosed case of Plaque Psoriasis was almost equal to the expected count, but by Pearson chi-square test obtained P-Value  $>0.05$  indicating the correlation is not statistically significant, further spearman's correlation gave an r value 0.007 indicating a negligible correlation existing between *Kitibha Kushta Lakshanas* according to *Acharya Bhela* and Plaque Psoriasis.

But the cross tab analysis of *Kitibha Kushta Lakshana* mentioned by *Ashtangahridaya* and *samgraha* with Plaque Psoriasis showed that observed count of *Kitibha Kushta Lakshana* according to *Ashtangahridaya* and *samgraha* in diagnosed cases of Plaque Psoriasis was less than the expected count, although P-Value obtained by Pearson chi-square test was less than 0.05 indicating statistical significance, further the spearman's correlation gave r value 0.263 showing a negligible correlation existing between the two. Hence it indicates that *Kitibha Kushta* according to *Ashtangahridaya* and *samgraha* cannot be compared and correlated with Plaque Psoriasis based on the present study.

*Kitibha Kushta Lakshana* mentioned by all *Acharyas* except *Ashtangahridaya* cannot be compared to either Guttate or Plaque Psoriasis as the crosstab, Pearson's chi-square test, spearman's correlation test result showed no statistical significance also clinically the *Lakshana* of *Kitibha Kushta* were noticed to be present in both Guttate as well as Plaque Psoriasis. But *Kitibha Kushta* explained by *Ashtanga Hridaya* on correlation showed statistical significance positively with Guttate Psoriasis and negatively with Plaque Psoriasis. Hence as a whole, it is appreciated that *Kitibha Kushta Lakshanas* cannot be correlated and compared with either subtype Guttate or Plaque Psoriasis, as to a certain extent the manifestation *Kitibha Kushta Lakshanas* is observed in both types of Psoriasis.

## CONCLUSION

The *Lakshana* of *Kitibha Kushta* mentioned by various *Acharyas* consists of

symptoms of Guttate Psoriasis as well as Plaque Psoriasis. On comparing the *Lakshana* of *Kitibha Kushta* mentioned by various *Acharyas* with two different sub-types of Psoriasis by crosstab and Pearson's chi-square test and Spearman's correlation test, showed no statistical significance except for *Kitibha Kushta Lakshanas* mentioned by *Ashtangahridaya* and *Ashtangasangraha* with Guttate Psoriasis with P-value =0.019. Therefore based on statistical tests result in *Kitibha Kushta Lakshanas* mentioned by *Ashtangahridaya* and *samgraha* can be probably compared and correlated to guttate psoriasis to a certain extent in the present study. But with this result, probably an obvious comparison and differentiation are not possible for *Kitibha Kushta Lakshana* mentioned by various *Acharya* with guttate and plaque psoriasis, as *Lakshana* mentioned by various *Acharyas* are found clinically distributed under both plaques as well as guttate psoriasis.

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How to cite this article: Saranya K, Ajantha. An observational study to appraise *kitibha kushta lakshana* in psoriasis. Int J Health Sci Res. 2020; 10(9):156-163.

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