



AN ETIOPATHOLOGICAL STUDY OF SHEETAPITTA, W.S.R.TO URTICARIA

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INTRODUCTION

The description of Sheetapitta, Udarda and Koth simulates with description of etiology and clinical features of Urticaria. Urticaria is a troublesome disease that manifests as wheals which are edematous pink or red, intensively itchy at their onset surrounded by a bright red flare. It generally occurs between the ages of 20 to 40 years. About 20-30% of individuals have at least one attack of Acute Urticaria in their life time. Acute and Chronic types of Urticaria have a wide variety of allergic etiologies. The common physical Urticarias include Cold Urticaria, Solar Urticaria, Pressure Urticaria, Dermographism and Cholinergic Urticaria. Angioedema occurs alone or in combination with Urticaria, including Urticular vasculitis and physical Urticaria. Urticaria is one of the disease described under allergies according to modern concepts abides equivalent clinical pictures of Sheetapitta, Udarda and Koth. Sheetapitta, Udarda and Koth follows immediately after Kushta in Madhava nidana and Yogaratnakara, as this entire manifest in skin and are caused by three Doshas. Sheeta pitta is diagnosed clinically based on symptoms like Varateedashtavat Shotha, Kandu, Raga being caused or aggravated by exposure to cold or even moist wind. Presentation of Udarda also includes (Swayathu) swelling resulted from Kapha, caused by contact with cold water (Sheeta paneeya samsparsa) particularly during cold season (Shishirartha). Hemadri also mentions Vakshoabhishyanda (discomfort in the chest region), Sheethavepathu (shivering from cold), Sheetapaneeya samsparsa (swelling caused by contact with cold water), Raga (accompanied by redness) and Kandu (itching) as Lakshana of Udarda. Koth presents with almost similar symptom but only difference is the etiological factor Asamyak vamaana or Chardi vegavorodha⁷ (improper emesis / suppression of the urge for vomiting). Similar features are mentioned as symptomatology of Urticaria in modern medical science. Common symptoms of Urticaria comprise intense itching, erythematous intra dermal vascular reaction manifesting as wheals or hives associated with burning sensation, fever and vomiting. Usually only symptomatic treatment is received by patients in primary setup leading to symptomatic relief, but the underlying actual pathology is not properly treated resulting in relapse. But it can be effectively managed by Ayurveda system of medicine. Therefore through this study an effort has been made to analyze etiology and pathogenesis of various types of Urticaria in scientific grounds and classify them under the headings of Sheetapitta, Udarda and Koth, and understand the etiopathogenesis, which would be contributory for initiating preventive steps and effective management.

MATERIALS METHODS AND OBJECTIVE

A clinical study to compare etiology, types, signs and symptoms of Urticaria with Sheetapitta, Udarda and Koth.

Sampling frame: Patients selected from OPD and IPD of KC Department of Dr. D. Y. Patil Ayurved College,

Pimpri Pune (M.S.) and other referrals were included in present study.

Study Design: Clinical observational study

Diagnostic criteria

Patients presenting with dermal swellings known as wheals associated with itching. Each episode of individual lesions which appear and disappear within 24

hrs.' or persists more than 24 hrs with or without arthralgia and myalgia.

Inclusion Criteria: Patients aged between 16 to 60 years of either sex fulfilling diagnostic criteria.

Exclusion Criteria: Patients suffering from other skin diseases such as Eczema, Psoriasis and any other major systemic disorder that may interfere in the course of study. Collection, Tabulation and Statistical Tests: 30 Patient fulfilling diagnostic criteria and inclusion criteria were categorized in to following 3 sub-groups as

Group A- Cold Urticaria,

Group B - Pressure Urticaria,

Group C - Solar Urticaria

And subjected to physical examination, lab investigation followed by detailed history recording with the help of questionnaire related to etiopathogenesis of Urticaria, Sheeta pitta, Udarda and Koth. Later an effort was made to compare sign and symptoms of Sheeta pitta Udarda and Koth with different types of urticaria and find etiology, thereby study etiopathogenesis. Statistical

analysis was carried through SSPS software. The outcome was assessed with relevant statistical tests like Chi Square Goodness of fit to elicit the etiological factors.

P=0.01- 0.001 is considered as statistically highly significant,

P=0.01-0.05 is considered as statistically significant and P> 0.05 is considered as non-significant.

OBSERVATION AND RESULTS

In the present study 50 patients presenting with Urticaria were screened, among them 30 patients who fulfilled the diagnostic and inclusion criteria were registered, out of which 24 patients had Sheeta pitta and 6 patients had Udarda, but none of the patient suffered from Koth in the present study. Among total 30 patients of Urticaria, considering subtypes of Urticaria 20 patients presented with Cold Urticaria, 7 patients with Pressure Urticaria and 3 patients had Solar Urticaria. Based on case Performa and specially designed questionnaire, patients were observed and analyzed as follows.

Table 1: Signs and symptoms of Sheeta pitta, Udarda and Koth.

S. N.	Sheeta pitta Lakshana	N=24		Udarda lakshana N=6			Koth lakshana N=0	
			%		%		0	
1	Varateedashatavat Shotha	24	100	Varateedashatavat shotha	6	100	Varateedashatavat shotha	0
2	Kandu	24	100	Kandu	6	100%	Ati kandu	0
3	Raga	10	41.66%	Raga	6	100%	Raga	0
4	Chardi	03	12.5%	Uroabishyanda	2	33.33%	Bahumandala	0
5	Daha	20	83.33%	Sheethavepathu	4	66.66%	Kshanikotpada vinasha lesions	0
6	Jwara	5	20.83%	-	-	-	-	

Table 2: Distribution Of Chief Complaints And Associated Complaints In Cold Urticaria, Pressure Urticaria, Solar Urticaria.

S. N.	Chief complaints	Cold Urticaria N= 20		Pressure Urticaria N= 07		Solar Urticaria N= 03	
		N	%	N	%	N	%
1	Wheal	20	100	07	100	03	100
2	Itching	18	75%	07	100	03	100
3	Erythematic	19	79%	07	100	03	100

Table 3: Associated Complaints =Total 30 Patients.

S. N.	Chief complaints	Cold Urticaria N= 20		Pressure Urticaria N= 07		Solar Urticaria N= 03	
		N	%	N	%	N	%
1	Vomiting	1	5%	0	0%	0	0%
2	Pricking sensation	10	50%	4	57.15%	2	66.66%
3	Burning sensation	12	60%	3	42.85%	1	33.33%
4	Fever and joint pain	07	35%	0	0%	0	0%

Table 4: Distribution of Sheeta pitta Udarda and Koth in Cold Urticaria, Pressure Urticaria.

S. N.	Sheeta pitta w.r.t. Urticaria	Sheetpitta -24		Udard -06		Koth- 0	
		N	%	N 6	%	N	%
1	Cold Urticaria N= 20	16	80%	4	20%	0	0
2	Pressure Urticaria N= 07	05	71.42%	2	28.58%	0	0
3	Solar Urticaria N= 3	03	100	0	0	0	0

Table 5: Nidanas of Urticaria- subtype Cold Urticaria manifesting as Sheeta pitta.

Nidana	Statistical significance
Excess lavana (salty), Excess amla (sour), Navanna (freshly harvested grains) Cold water after hot drinks, Milk and curd together, Pishtanna (fermented foods) ,Oily food, Dadhi (curd), Chapatti, Masha (blackgram), Sarshapa (mustard), Dal, Peanut , Ragi ,Exposure to cold weather.	Statistically highly significant with p value 0.000
Intake of sour fruits with milk, Curd at night, Fish with milk, Refrigerated food items, Different fruit items like strawberry, jackfruits etc, Horse gram, Non-veg food items like egg, fish, chicken, shellfish, mutton, beef, Alcoholic preparations, Coffee, Tea.	Statistically non-significant with P value >0.05.

Table 06: Nidanas in Urticaria subtype Pressure Urticaria manifesting as Sheeta pitta.

Nidana	Statistical significance
Exposure to cold weather Pishtanna, Chapatti, Banana, Masha,	Statistically significant with p value 0.034.
Milk and curd together, Sour fruits with milk, Maida, Oily foods, Refrigerated food, Excess lavana, Excess amla, Peanut, Dadhi, Vidahi ahara, Fish with milk Bakery, Ragi, Curd at night, Cold water after hot drinks, , Refrigerated food items, Different fruit items like strawberry, jackfruits etc, Horse gram, Non-veg food items like egg, fish, chicken, shellfish, mutton, beef, Alcoholic preparations, Coffee, Tea.	Statistically non-significant with p value >0.05.

Table 07: Nidanas in Urticaria- subtype Solar Urticaria manifesting as Sheeta pitta.

Nidana	Statistical significance
Vidahi Ahara Peanut	Statistically highly significant with p value 0.000.
Curd at night, Cold water after hot drinks, Milk and curd together, Sour fruits with milk, Pishtanna, Oily food, Dadhi, Dal, Chapatti, Excess lavana, Excess amla, Navanna, Masha, Ragi, Bakery, Cheese, Tea, Coffee, Exposure to cold weather, Krodha (anger) Maida, Fish with milk, Refrigerated food items, Different fruit items like strawberry, jackfruits etc, Horse gram, Non-veg food items like egg, fish, chicken, shellfish, mutton, beef, Alcoholic preparations Coffee, Tea.	Statistically non-significant with p value >0.05.

DISCUSSION

In the present study out of total 30 patients, maximum 21 patients belonged to age group between 20-30 years. This study shows a greater incidence of Urticaria in younger age. According to Sushruta samhita, youvana is the period of natural aggravation of Pitta Dosha. This may lead to Rakta Dushti due to indulging in Nidanas, leading to Sthanasamsraya, causing Tvak vikaras. A dominance of female (N=18) more affected than male (N=12_) is seen. The universal data also suggests more prevalence of Urticaria in women supports present observation. All 30 patients presented with all cardinal symptoms of Urticaria like wheal, itching and erythematic. Consideration of sub types of urticarial shows, Maximum number of patients i.e., 20 (66.66%) had cold Urticaria. Pressure Urticaria was found in

07(23.33%) and Solar Urticaria in 3(10 %). It shows higher incidence of Cold Urticaria compared to other 2 forms of Urticaria Out of total 30 Urticaria patients 24 (80%) presented as Sheeta pitta and only 6 (20%) patients presented with Udarda and none of the patients suffered from Koth. A higher incidence of disease Sheeta pitta compared to Udarda and Koth was observed in the present study with special reference to urticaria. Analysis of Nidana of patients suffering from urticaria revealed that, 24 patients suffering from subtype Cold Urticaria, showed excessive indulgence in aharaja nidanas like pishtanna (Kapha Pitta Prakopa), Dadhi (Kapha Pitta,Rakta Dushaka) , Intake of cold water after hot drinks, milk and curd together (considered as Virudha and Tridosha kara), Excessive consumption of oily foods, excess Amla11, Masha (Pitta, Rakta Prakopaka),

Chapatti, Navanna (Kapha Vardhaka), Excess Lavana (leads to Pitta Dushti), Mustard (Tridoshakara), Intake of dal (cause Urticaria by direct histamine liberation or by allergic sensitivity) and Viharaja Nidana exposure to cold weather. The intake of peanut (can produce Urticaria by direct histamine liberation or by allergic sensitivity.) among patients of Cold urticaria and Solar urticaria was statistically significant in manifestation of Sheetapitta. Analysis of Nidana among 8 patients suffering from sub type Pressure Urticaria showed that following Nidanas were statistically significant suggesting a definite role of these Nidanas in manifestation of Sheetapitta. Pishtanna, chapatti, banana, black gram and Viharaja Nidana include exposure to cold weather. Among the Aharaja Nidanas in Urticaria – subtype Solar Urticaria manifesting as Sheetapitta, following were statistically significant, intake of fast food and peanut. Sheeta pitta manifests as skin rash notable as dark red, raised, itchy rashes. In Ayurveda it is considered as Tridoshajanya (Kapha+Pitta+Vata), which gradually spreads to the skin (Twacha) and the other tissues (Raktadi Dhatu). It is diagnosed clinically based upon the symptoms like Raga, Varateedamshtavat Shotha, Kandu and these symptoms are triggered or aggravated by exposure to cold or even moist wind. Udarda is a Kaphaja vikara and manifests with symptoms like Vaksho abhishyanda, Sheeta vepathu, Sheetambu sparsajanya sophra, Raga and Kandu. The same has been described in modern symptomatology of Urticaria, most often has an unknown, nonspecific etiology, but can be related to medications, food and similar vascular stimulating agents. The activation of mast cells and their release of mediators is the unifying mechanism of most Urticaria. Histamine release is associated with mast cell degranulation. There is initially erythema at the injection site secondary to vasodilatation, next the edema leads to a hive or edematous plaque. In the final stage there is an erythematous ring surrounding the hive as the axonal reflex produces more vascular changes. The common symptoms are usually intensely itching intra dermal vascular reaction (wheals or hives) associated with burning sensation, fever and vomiting. According to Madhavanidana, Prakupita Vata and Kapha (PradushtauKaphamarutau) due to Sheetamaruta Samsparshatadi Nidana, in association with Pitta (Pittenasahasambhooya) spreads internally and externally (Bahir-Antahvisarpatah) and results in manifestation of Sheetapitta-Udarda and Koth. Exposure to Sheethamarutha leads to Pradushana of Kapha and Vata due to Samanaguna (Sheethaguna). This Vata and Kapha combine with pitta and circulate all over the body. Bahirvisarpatha of this combination of Vikrutha Tridosha results in Utsannamandala over the Twak. Antharvisarpatha of this combination of Vikrutha Tridosha, resides in Raktadi dhatus and produces other symptoms. The clinical manifestation of Sheetapitta, Udarda and Koth has close resemblance to each other and with Urticaria. General characteristic of nearly all these conditions is Varatidamshtavat shota associated with Kandu and Raga. Based on the predominant Doshas

involved in the pathogenesis, these three can be distinguished from one other. This implies that Kapha-pitta doshas cause Udarda and Vatapitta predominant Doshas cause Sheetapitta and Kapha pitta Pradhana Rakta Dushti leads to Koth. Hence it can be put forth that in Sheetapitta pitta Samsrustha Vata plays a dominant role and in Udarda, Pitta Samsrustha Kapha has a significant role. Possible Samprapthi (etiopathology) of Sheetapitta, Udarda and Koth has contributions from both external as well as internal mechanism. Dosh Dushya Samoorchana leads to Dusti of Tridoshas mainly Brajakapitta leading to Agnimandya which can be considered as release of different mediators by hypersensitivity reactions resulting in different types of urticaria. The eliciting factor voiced for Urticaria especially for Cold Urticaria include cold air/water/wind/food/objects is similar to the Nidana mentioned for Sheetapitta, Udarda and Koth ie, Sheetamaruta Samsparsha /Sheeta Paneeya Samsparsha. Prakriti of a person, Rithu (climate variation), Desha, Dosh condition, Agni, are key factors for these disorders to appear.

CONCLUSION

The clinical study shows that Indulgence in Nidanas like intake of curd at night, intake of cold water after hot drinks, Pishtanna, oily foods, curd, chappatti, consumption of excess Lavana, intake of excess Amla, Navanna, Masha, Sarshapa, dal, peanut has a role in the causation of Sheetapitta with special reference to Cold Urticaria. Indulgence in Nidanas like intake of Pishtanna, chapatti, banana, Masha, Navanna and indulgence in exposure to cold weather has a role in causation of Sheetapitta with special reference to Pressure Urticaria. Indulgence in Nidanas like peanut and Vidahi Ahara has a role in causation of Sheetapitta with special reference to Solar urticaria. Hence it is clear that Nidanas mentioned in Ayurveda like Sheeta Maruta Samsparsha, Sheeta Paneeya Samsparsha has a role in manifestation of Sheetapitta, Udarda and Koth. Incidence of Koth is uncommon. Sheetapitta and Udarda can manifest as Cold urticaria, as Pressure urticaria and as solar urticaria.

REFERENCES

1. Bhavaprakasha, Madhyakhanda 53/6, Ed. By. Bramhashankar Mishra with Vidyotini Hindi Commentary, Chaukhambha Sanskrit Pratisthan, Varanasi, 314.
2. Acharya Y.T. SushrutaSamhita of Sushruta with NibandhaSangraha Commentary. Reprint ed. Varanasi. Chaukhambha Orientalia, 2009; 185.
3. Acharya Y.T. SushrutaSamhita of Sushruta with NibandhaSangraha Commentary. Reprint ed. Varanasi. Chaukhambha Orientalia; 2009; 217.
4. Acharya Y.T. SushrutaSamhita of Sushruta with NibandhaSangraha Commentary. Reprint ed. Varanasi. ChaukhambhaOrientalia, 2009; 219.

5. Acharya Y.T. SushrutaSamhita of Sushruta with NibandhaSangraha Commentary. Reprint ed. Varanasi. Chaukhambha Orientalia, 2009; 185.
6. Sastri B.S. Yogaratnakara with Vidyotinihindi commentary. Reprint ed. Varanasi Chaukhambha Prakashan, 2010; 235.
7. Vallia RG, Text Book and Atlas Of Dermatology, (1sted. Vol-1) Bombay. Bhalani Publishing House, 1996; 431-459.
8. Shah S N. API Text Book of Medicine. 7th ed. New Delhi: association of Physicians of India, 2003; 1315.
9. Falco O B, Wig G P, Wolff H H, Burgdorf W H C. Dermatology .4th ed revised New York: spring, 1996; 431.
10. Harrison T R. Harrisons Principles of internal medicines. 17th ed. New York: Mcgraw-hill inc, 2008; 330.
11. Upadhyaya Y. Madhavanidanam of Sri Madhavakara. 17th ed. Varanasi (VolII). Chaukhambha Sanskrit Sansthan, 1987; 290.
12. Sastri B.S. Yogaratnakara with Vidyotini hindi commentary. Reprint ed. Varanasi Chaukhambha Prakashan, 2010; 235.
13. Tripathi B. Srimath Vagbhatacharitham Astanga Hrudayam. Varanasi: Chaukamba Sanskrit Prathisthan, 2010; 450.
14. Vaidya H.P. Astangahrudayam of Vagbhata. 10th ed. Varanasi .Chaukhambha Orientalia, 2011; 55.
15. Falco O B, Wig G P, Wolff H H, Burgdorf W H C. Dermatology 4th ed revised New York: spring, 1996; 431.
16. Acharya Y. T. Sushruta Samhita of Sushruta with Nibandha Sangraha Commentary. Reprint ed. Varanasi. Chaukhambha Orientalia, 2009; 244.