IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Etiopathological Study Of *Pramehagata Vikrita Kleda* With Special Reference To Laboratory Parameters

Muhith Abdul[1], Baishya Anup[2]

[1]3rd Year PG Scholar, [2]Professor & HOD, Department of Roga Nidan, Govt. Ayurvedic College, Guwahati-14, Assam

ABSTRACT: Background: In Ayurveda, *Kleda* represents the physiological moisture essential for tissue integrity, while its pathological state (*Vikrita Kleda*) plays a central role in the pathogenesis of several metabolic and systemic disorders. *Prameha* is classically described as a *Kleda-pradhana Vyadhi*, yet its etiopathological expression in relation to measurable laboratory parameters remains underexplored. **Aim:** To establish *Pramehagata Vikrita Kleda* as a distinct etiopathological entity and to evaluate its association with laboratory parameters in *Prameha* and related disorders. **Methods:** A clinical observational study was conducted on 100 subjects, comprising 20 patients each of *Prameha*, *Sthoulya*, *Sotha*, *Kustha*, and *Vrana*. Assessment of *Vikrita Kleda* was carried out using a specially designed proforma derived from classical Ayurvedic descriptions of *Kapha vriddhi* and *Ama*, supported by objective laboratory investigations including fasting and postprandial blood glucose, blood urea, serum creatinine, and urine examination. The presence of *Vikrita Kleda* was confirmed when four or more predefined clinical features were observed. **Results:** *Prameha* patients demonstrated the highest incidence of *Vikrita Kleda* features, particularly *Avila Mutrata* (100%), *Mutramadhurya* (75%), *Pipasa Adhikya* (80%), and *Nidra Adhikya* (80%). Laboratory findings revealed consistently elevated fasting (100%) and postprandial blood sugar levels (80%), along with a higher incidence of raised blood urea (65%) and serum creatinine (70%), suggesting systemic involvement of *Kleda dushti*. Urine analysis showed a predominance of cloudy and turbid urine in *Prameha*, whereas other disease groups largely exhibited normal urinary parameters. **Conclusion:** The study validates *Pramehagata Vikrita Kleda* as a key etiopathological factor in *Prameha*, with clear clinical and laboratory correlations. Biochemical parameters and urine characteristics may serve as objective indicators of *Kleda dushti*, supporting an integrative approach to understanding *Prameha* through both Ayurvedic principles and modern diagnostics.

Keywords: *Ayurveda, Kleda, Prameha*, FBS, PPBS, Creatinine, BUN, Urine Examination.

INTRODUCTION

In Ayurveda, *Kleda* represents the physiological moisture essential for maintaining tissue integrity and functional balance[1]. Derived from *Jala Mahabhuta*, *Kleda* supports normal metabolic processes in its *Prakrita Avastha*, while its excess is eliminated through urine and sweat without causing disease. However, when regulatory mechanisms fail, *Kleda* enters a pathological state (*Vikrita Avastha*), leading to its abnormal accumulation and systemic involvement, which plays a crucial role in the genesis of several metabolic disorders[2, 3]. *Prameha* is classically described as a *Kleda-pradhana Vyadhi*, characterised by *Prabhuta* and *Avila Mutrata*, reflecting deranged fluid metabolism and altered urinary excretion. The disease primarily involves *Medovaha* and *Mutravaha Srotas* and progresses through sustained vitiation of *Kapha* and impairment of *Agni*, resulting in abnormal accumulation of *Kleda* and its association with *Meda Dhatu*. Over time, this disturbed *Kleda* spreads to deeper tissues, leading to *Dhatu Shaithilya* and multisystem involvement. From a modern perspective, *Prameha* closely resembles diabetes mellitus, a metabolic disorder marked by chronic hyperglycaemia and progressive organ dysfunction. Laboratory parameters such as blood glucose levels, renal function tests, and urine examination reflect systemic fluid and metabolic imbalance, corresponding to the Ayurvedic concept of *Kleda dushti*. Despite this conceptual parallel, limited studies have attempted to objectively correlate *Vikrita Kleda* with laboratory findings. Therefore, the present study aims to explore *Pramehagata Vikrita Kleda* as a distinct etiopathological entity and to correlate its classical clinical features with measurable laboratory parameters.

AIM and Objectives:

a) AIM:

- To establish the concept of *Pramehagata Vikrita Kleda* and its role in the etiopathogenesis of different *Vyadhi.*

b) OBJECTIVE:

- To assess the *Pramehagat Vikrita Kleda* as an etiopathological entity in *Prameha*
- To explore the probable correlation of *Pramehagata Vikrita Kleda* with different laboratory parameters in *Prameha*

MATERIALS AND METHODS:

Study Design and Selection of Subjects: This clinical observational study was conducted at the Government. Ayurvedic College and Hospital, Jalukbari, Assam. Literary references were drawn from classical Ayurvedic texts, modern literature, recent journal articles, and credible online sources. A total of 100 patients (20 each of *Prameha, Sthoulya, Sotha, Kustha,* and *Vrana*) were selected randomly from the OPD and IPD. Both male and female patients, aged 18 to 70 years, exhibiting clinical features associated with *Pramehagata Vikrita Kleda*, and who provided informed consent, were included.

Clinical Assessment: A specially designed clinical proforma and validated questionnaire were used to assess both subjective and objective parameters of *Pramehagata Vikrita Kleda*. The questionnaire was developed from classical Ayurvedic descriptions and translated into patient-friendly language, featuring binary response options (Yes = 1, No = 0). Laboratory parameters were graded as usual (0), high (1), or low (2).

Diagnostic and Laboratory Investigations

Each patient underwent the following investigations: biochemical tests (fasting blood sugar, postprandial blood sugar, Urea, Creatinine, Uric Acid, Bilirubin, and a urine routine examination.

***Vikrita Kleda* Assessment Framework:** Since classical texts lack direct descriptions of *Kleda* features, assessment was based on Ayurvedic concepts of *Kapha Vriddhi and Ama*. A level was considered positive for *Vikrita Kleda* if four or more out of seven identified features were present. The proportion of subjective vs. objective findings and the dominance of specific types of *Kleda* were calculated accordingly.

PRAMEHA

Prameha is a spectrum of diseases which involve primarily *Medovaha Srotasa* along with the involvement of *Mutravaha Srotas*. This is characterised by *Prabhuta Mutrata* (increased quantity of urine) and *Avila Mutrata* (turbidity of urine) [4]. All Ayurveda literatures described 20 types of *Prameha*[5]. Sushruta has classified this disease in *Adibala Pravritta Vikara* of *Adhyatmika Vikara*[6]. As per Charaka, *Prameha* is considered to be *Anushangi Vikara* i.e. the disease which will more closely attached to the individual. In this context, *Prabhuta Mutrata* is self explanatory where in the amount of urine passed in either one frequency or in 24 hours is increased. The term *Avila Mutrata* refers to turbid urine. This fluid contains additional metabolites such urea, uric acid, creatinine, pus cells, red blood cells, casts, and crystals, distinguishing it from pure water. In abnormal situations, urine may contain sugar, proteins, ketone bodies, red blood cells, bile salts, and bile colors. *Avilatva* (turbidity) varies depending on disease manifestation. Thus, *Prameha* is the spectrum of diseases where in person will have passage of excess amount of turbid urine. *Amashaya* is the *Udbhava Sthana* of the disease, *Sanchara Sthana* is *Sarvasharira* and *Vyakta Sthana* is *Mutra*. *Atipravritti* is the type of *Srotodusthi* observed in the whole progression of the disease[7].

***Kleda* as a *Dushya* in *Prameha Samprapti*:**

Excess indulgence in the *Nidanas* primarily disturbs *Kapha*, often in association with *Pitta*. Many of these causative factors—such as day sleep (*Divaswapna*) and excessive intake of curd (*Dadhisevana*)—simultaneously disrupt both *Kapha* and *Pitta*. This disturbance results in an abnormal rise of body fluids (*Kleda*). Since the same factors that vitiate *Kapha* and *Pitta* also specifically impair the *Medovaha Srotas* (channels of fat metabolism), the *Doshas* naturally tend to affect the *Medo Dhatu* (fat tissue). Thus, repeated indulgence in these causative habits first aggravates *Kapha* and *Pitta*, producing an imbalance in *Kleda*. The vitiated *Doshas* then move towards *Medo Dhatu*, disturb fat metabolism, and further aggravate the imbalance of *Kleda*[8]. In a healthy state, excess fluid in the body is regulated—eliminated through urine and balanced by sweat. However, in *Prameha*, because of sedentary habits and improper diet (described as *Asya Sukham, Swapna Sukham*—excessive eating and sleeping), sweating is greatly reduced. As a result, the accumulated *Kleda* (moisture or fluid) gets diverted towards the urinary system, causing frequent and excessive urination, which gradually develops into *Prameha*. If left untreated at this stage, the condition leads to *Bahu Abaddha Medas*—an abnormal increase of fatty tissue that becomes excessive and loses its firmness. Over time, this disturbed and excessive *Kleda* penetrates deeper, affecting almost all body tissues—*Mamsa* (muscle), *Majja* (marrow), *Ojus* (vital essence), and *Lasika* (lymph)—except *Asthi Dhatu* (bone). This results in *Dhatu Shaithilya*, or weakening and degeneration of tissues, much like how excessive watering harms rather than nourishes a paddy crop. In advanced stages of *Prameha*, *Kleda* is no longer confined to fat tissue (*Medo Dhatu*), but spreads throughout the body, disturbing multiple systems. Essentially, *Prameha* reflects a *Kapha* imbalance—where the *Prithvi* (earth element) is depleted and the *Jala* (water element) increases excessively. This imbalance is also the reason why ulcers in *Prameha* patients are slow to heal[9]. The references of *Kleda* in *Prameha* has been given below (Table 1).

Table 1: References of *Kleda* in *Prameha*

PRAMEHA			
Charaka Samhita	***Sushruta Samhita***	***Astanga Hridaya***	***Madhava Nidana***
Charaka Samhita Nidana Sthana-4 Prameha Nidana	*Sushruta Samhita Nidana Sthana-6 Prameha Nidana*	*Astanga Hridaya Nidana Sthana - 10 Prameha Nidana*	*Madhava Nidana-33 Prameha Pidika Nidana*
Charaka Samhita Chikitsa Sthana-6 Prameha Chikitsa	*Sushrut Samhita Chikitsa Sthana- 11 Prameha Chikitsa*	*Astanga Hridaya Chikitsa Sthana-12 Prameha Chikitsa*	

***Samanya Prameha Dosha Dushya*[10]:**

Dosha- Vata, Pitta and *Kapha*

Dushyas- Medas, Rakta, Shukra, Ambu (body fluid), *Vasa* (muscle fat), *Lasika* (lymph), *Majja, Rasa, Ojas* and *Mamsa*

***Samprapti* of *Prameha*:** When *Kapha* becomes aggravated, it disturbs *Meda* (fat tissue), *Mamsa* (muscle tissue), and *Kleda* (body fluids) present in the urinary system (*Basti*). This leads to the manifestation of various *Kapha*-dominant types of *Meha*. In the same way, when *Pitta* is aggravated—especially due to excessive intake of hot and sharp substances (*Ushna Virya*)—it disrupts these elements and results in *Pitta*-dominant forms of *Meha*. On the other hand, when *Kapha* and *Pitta* are relatively weakened, aggravated *Vata* pulls vital tissue elements like *Ojas* (vital energy), *Majja* (marrow), and *Lasika* (lymph) into the urinary channels, disturbing them and giving rise to *Vata*-dominant *Prameha*. Thus, depending on which *Dosha* enters and vitiates the urinary tract, different types of *Meha* arise, each marked by the dominance of that particular *Dosha*[11].

Kaphaja Prameha: Due to *Asya Sukhadi Kapha Vardhaka Nidana, Kapha Pradhana Tridosha* get vitiated, *Kapha* spread throughout the *Sharira. Shukradi Dushya (10 Dushya*) mainly *Majja, Meda* and *Mamsa* gets vitiated. Further *Dosha* get obstructed in *Basti, Vakshana* and *Mamsa Dhatu* leads to excess *Vruddhi* of *Kleda Dhatu* which combine with *Meda Dhatu*. Excess *Vruddhi* of *Meda* and *Kleda*, brings *Kleda* to *Mutravaha Srotas* and thus *Samanya Kaphaja Prameha Lakshana* are seen[12].

Pittaja Prameha: *Ushna, Amla, Lavana, Pitta Vardhaka Nidana* leads to *Pitta Pradhana Tridosha* vitiation. *Shukradi Dushya* mainly *Meda, Mamsa* and *Lasika* gets vitiated due to *Kapha* spread throughout the *Sharir*. Further *Dosha* get obstructed in *Basti, Vakshana* and *Mamsa Dhatu* which leads to excess *Vruddhi* of *Kleda Dhatu* which combine with *Meda Dhatu* and leads to excess *Vruddhi* of *Meda* and *Kleda* brings *Kleda* to *Mutravaha Srotas* leading to *Pittaja Prameha Lakshana*[13].

Vataja Prameha: Due to the *Kashaya, Katu, Tikta, Ruksha, Shita, Vatakara Nidana, Vata Pradhana Tridosha* get Vitiated. *Kapha Dosha* spread throughout the *Sharir*. *Gambira Dhatu* such as *Majja, Oja, Vasa, Lasika* get vitiated, *Dosha* get obstructed in *Basti* and *Mamsa Dhatu.* Excess *vruddhi* of *Kleda Dhatu,* combine with *Meda Dhatu*. Excess *Vruddhi* of *Meda* and *Kleda,* brings *Kleda* to *Mutravaha Srotas* and leads to the genesis of *Vataja Prameha*[14].

Dosha* and *Dushya* of *Prameha: Due to the exposure to etiological factors, *Medas, Mamsa* and *Kleda* of the body will be moved to *Basti* by vitiated *Kapha dosha*. Due to the decrease of other *Dosha, Vata Dosha* will get vitiated and this vitiated *Vata Dosha* will move the abnormal *Dhatu* to *Basti* region leading to the manifestation of *Vataja Prameha*[15].

MODERN DISEASE REVIEW:

Diabetes mellitus is a metabolic disorder characterized by defective insulin secretion along with varying levels of peripheral insulin resistance, ultimately resulting in elevated blood glucose levels (*hyperglycemia*). In the early stages, symptoms primarily arise due to hyperglycemia and typically include excessive thirst (*polydipsia*), increased appetite (*polyphagia*), and frequent passage of large volumes of urine (*polyuria*). If left uncontrolled, the condition may progress to long-term complications such as vascular disorders, peripheral neuropathy, and increased susceptibility to infections. Diagnosis is generally established through the measurement of plasma glucose levels[16].

RESULTS AND OBSERVATION: In this study, total 100 pre-diagnosed subjects with 20 subjects each of *Prameha, Sthoulya, Sotha, Kustha* and *Vrana* were taken for the study.

Incidence of *Pramehagata Vikrita Kleda* (Table 2 & Fig 1)**:** The study shows that *Prameha* subjects is having the highest overall incidence of multiple *Kleda* related symptoms, especially *Avila Mutrata* (100%) followed by *Swasadhikya* (85%), *Nidraadhikya* (80%). Similarly in *Sthoulya*, *Nidradhikya* (95%), and *Swasadhikya* (80%) were predominant. In *Sotha* subjects, *Pipasa adhikya* (25%) being the most observed symptom. *Kustha* subjects exhibited notable incidence of *Angagandha* (45%) and *Pipasa Adhikya* (25%). *Vrana* subjects showed mild to moderate involvement, particularly *Angagandha* (20%) and *Nidraadhikya* (20%).

Table 2: Incidence of *Pramehagata Vikrita Kleda*

Pramehagata Vikrita Kleda	***Prameha*** (n=20)		***Sthoulya*** (n=20)		***Sotha*** (n=20)		***Kustha*** (n=20)		***Vrana*** (n=20)	
	No of Patient	%	No of Patient	%	No of Patient	%	No of Patient	%	No of Patient	%
Avila Mutrata	20	100	4	20	3	15	1	5	1	5
Mutramadhurya	15	75	2	10	1	5	1	5	1	5
Pipasa- Adhikya	16	80	18	90	5	25	4	20	1	5
Kshuda-Adhikya	15	75	19	95	4	20	5	25	1	5
Swasadhikya	17	85	20	100	3	15	14	70	2	10
Angagandha	13	65	17	85	1	5	9	45	2	10
Nidradhikya	16	80	19	95	1	5	3	15	4	20

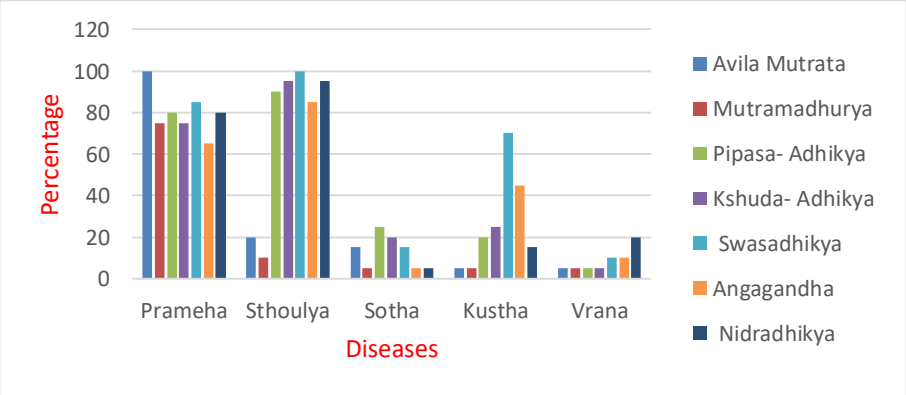

Fig. 1: Incidence of *Pramehagata Vikrita Kleda in Prameha* in 20 subjects of *Prameha, Sthoulya, Sotha, Kustha* and *Vrana* (n=100)

Incidence of FBS in *Prameha, Sthoulya, Sotha, Kustha* and *Vrana* (Table 3 & Fig. 2)**:** In *Prameha,* 100% of subjects have high FBS. In *Sthoulya,* 75% have normal FBS, 25% had high FBS, and none are low. In *Sotha,* 100% have normal FBS, with no high or low cases. In *Kustha,* 90% have normal FBS, 10% had high FBS, and none are low. In *Vrana,* 95% have normal FBS, 5% have high FBS, and none are low.

Table 3: Incidence of FBS in *Prameha, Sthoulya, Sotha, Kustha* and *Vrana*

FBS	*Prameha* (n=20)		*Sthoulya* (n=20)		*Sotha* (n=20)		*Kustha* (n=20)		*Vrana* (n=20)	
	No of Patient	%	No of Patient	%	No of Patient	%	No of Patient	%	No of Patient	%
Within Normal Limit	0	0	15	75	20	100	18	90	19	95
High	20	100	5	25	0	0	2	10	1	5
Low	0	0	0	0	0	0	0	0	0	0

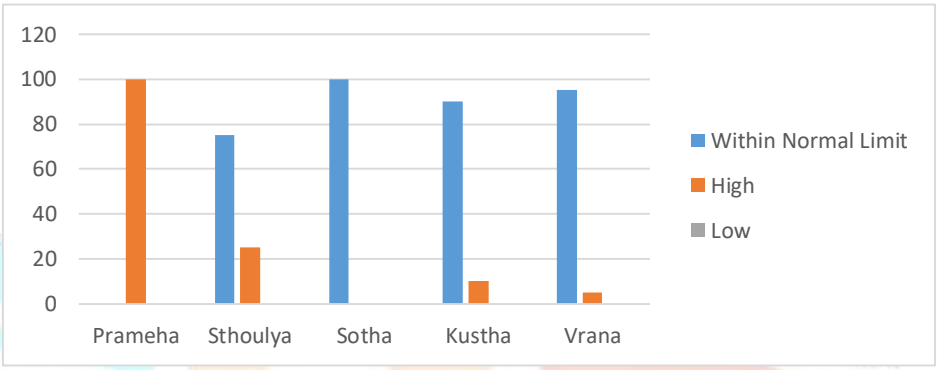

Fig. 2: Incidence of FBS in 20 subjects of *Prameha, Sthoulya, Sotha, Kustha* and *Vrana* (n=100)

Incidence of PPBS in *Prameha, Sthoulya, Sotha, Kustha* and *Vrana* (Table 4 & Fig. 3)**:** In *Prameha,* 80% have high PPBS, 20% are within normal limits, and none are low, reinforcing the diabetic profile with significant post-meal sugar elevation. In *Sthoulya*, 90% have normal PPBS, 10% had high PPBS, and none are low, indicating a mostly normal response with a small elevated subset. In *Sotha*, 100% have normal PPBS, with no high or low cases, similar to FBS results, showing no notable sugar irregularities. In *Kustha*, 90% have normal PPBS, 10% had high PPBS, and none are low, consistent with FBS findings. In *Vrana*, 100% have normal PPBS, with no high or low cases.

Table 4: Incidence of PPBS in *Prameha, Sthoulya, Sotha, Kustha* and *Vrana*

PPBS	*Prameha* (n=20)		*Sthoulya* (n=20)		*Sotha* (n=20)		*Kustha* (n=20)		*Vrana* (n=20)	
	No of Patient	%	No of Patient	%	No of Patient	%	No of Patient	%	No of Patient	%
Within Normal Limit	4	20	18	90	20	100	18	90	20	100
High	16	80	2	10	0	0	2	10	0	0
Low	0	0	0	0	0	0	0	0	0	0

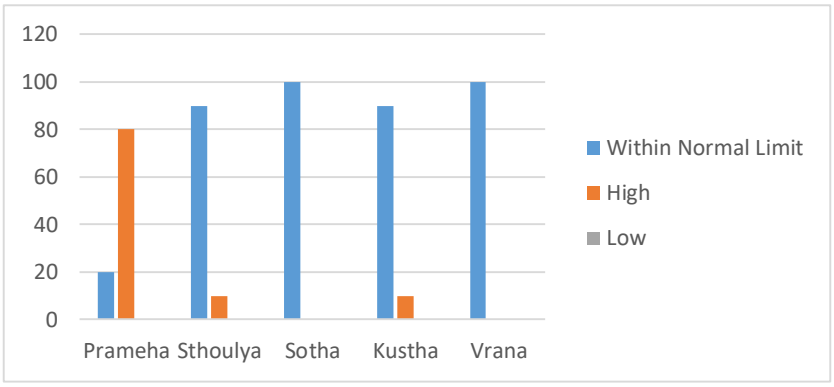

Fig. 3: Incidence of PPBS in 20 subjects of *Prameha, Sthoulya, Sotha, Kustha* and *Vrana* (n=100)

Incidence of Serum Creatinine in *Prameha, Sthoulya, Sotha, Kustha* and *Vrana* (Table 5 & Fig. 4)**:** In *Prameha*, 30% have normal Serum Creatinine levels, 70% had high levels, and 0% has low levels. In *Sthoulya*, 85% have normal levels, 15% had high levels, and 0% has low levels. In *Sotha*, 60% have normal levels, 40% had high levels, and 0% has low levels. In *Kustha*, 95% have normal levels, 5% have high levels, and 0% has low levels. In *Vrana*, 100% have normal levels, 0% had high levels, and 0% has low levels.

Table 5: Incidence of Serum Creatinine in *Prameha, Sthoulya, Sotha, Kustha* and *Vrana*

Serum Creatinine	***Prameha*** **(n=20)**		***Sthoulya*** **(n=20)**		***Sotha*** **(n=20)**		***Kustha*** **(n=20)**		***Vrana*** **(n=20)**	
	No of Patient	%	No of Patient	%	No of Patient	%	No of Patient	%	No of Patient	%
Within Normal Limit	6	30	17	85	12	60	19	95	20	100
High	14	70	3	15	8	40	1	5	0	0
Low	0	0	0	0	0	0	0	0	0	0

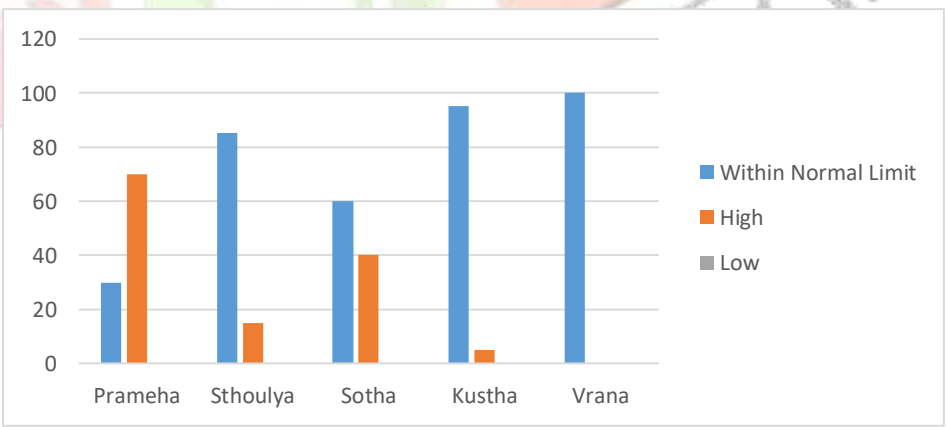

Fig. 4: Incidence of Serum Creatinine in 20 subjects of *Prameha, Sthoulya, Sotha, Kustha* and *Vrana* (n=100)

Incidence of Blood Urea in *Prameha, Sthoulya, Sotha, Kustha* and *Vrana* (Table 6 & Fig. 5)**:** In *Prameha*, 30% of subjects have normal Blood Urea levels, 65% have high levels, and 5% have low levels. In *Sthoulya*, 85% have normal levels, 15% had high levels, and 0% has low levels. In *Sotha*, 75% have normal levels, 25% had high levels, and 0% has low levels. In *Kustha*, 95% have normal levels, 5% have high levels, and 0% has

low levels. In *Vrana*, 95% have normal levels, 5% have high levels, and 0% has low levels. In *Prameha*, there is significantly higher incidence of elevated Blood Urea (65%) compared to other conditions.

Table 6: Incidence of Blood Urea in *Prameha, Sthoulya, Sotha, Kustha* and *Vrana*

Blood Urea	*Prameha* (n=20)		*Sthoulya* (n=20)		*Sotha* (n=20)		*Kustha* (n=20)		*Vrana* (n=20)	
	No of Patient	%	No of Patient	%	No of Patient	%	No of Patient	%	No of Patient	%
Within Normal Limit	6	30	17	85	15	75	19	95	19	95
High	13	65	3	15	5	25	1	5	1	5
Low	1	5	0	0	0	0	0	0	0	0

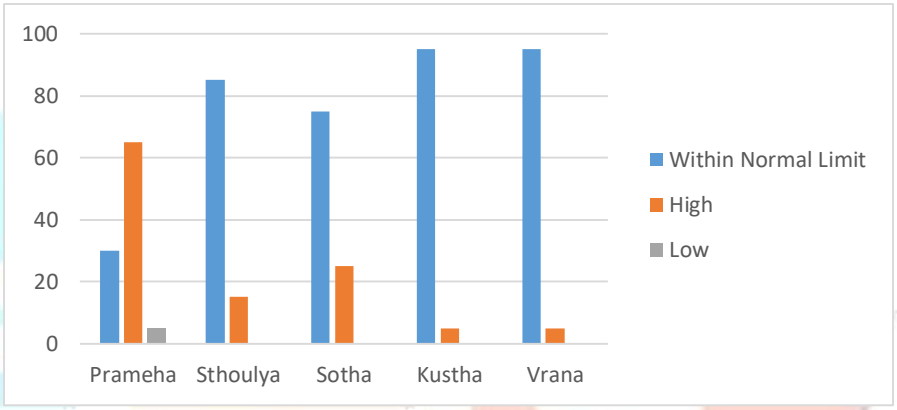

Fig. 5: Incidence of Blood Urea in 20 subjects of *Prameha, Sthoulya, Sotha, Kustha* and *Vrana* (n=100)

Incidence of Urine Colour in *Prameha, Sthoulya, Sotha, Kustha* and *Vrana* (Table 7 & Fig. 6)**:** In *Prameha*, 40% of subjects (8/20) have pale yellow urine, 15% (3/20) have dark yellow, and 45% (9/20) have cloudy urine. No other colors are observed. In *Sthoulya*, 100% of subjects (20/20) have pale yellow urine, with no other colors reported. In *Sotha*, 95% of subjects (19/20) have pale yellow urine, and 5% (1/20) have dark yellow urine. In *Kustha*, 95% of subjects (19/20) have pale yellow urine, and 5% (1/20) have cloudy urine. In *Vrana*, 100% of subjects (20/20) have pale yellow urine, with no other colors observed.

Table 7: Incidence of Urine Colour in *Prameha, Sthoulya, Sotha, Kustha* and *Vrana*

Colour	*Prameha* (n=20)		*Sthoulya* (n=20)		*Sotha* (n=20)		*Kustha* (n=20)		*Vrana* (n=20)	
	No of Patient	%	No of Patient	%	No of Patient	%	No of Patient	%	No of Patient	%
Pale Yellow	8	40	20	100	19	95	19	95	20	100
Dark Yellow	3	15	0	0	1	5	0	0	0	0
Red	0	0	0	0	0	0	0	0	0	0
Brown	0	0	0	0	0	0	0	0	0	0
Green	0	0	0	0	0	0	0	0	0	0
Cloudy	9	45	0	0	0	0	1	5	0	0

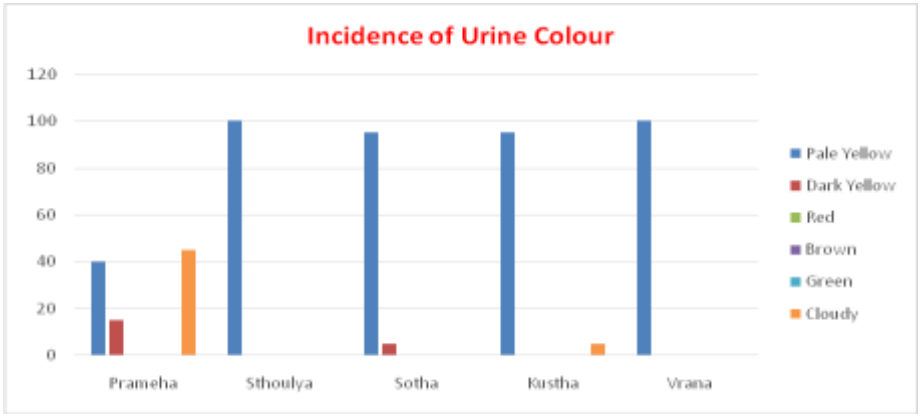

Fig. 6: Incidence of Urine Colour in 20 subjects of *Prameha, Sthoulya, Sotha, Kustha* and *Vrana* (n=100)

Incidence of Urine Clarity in *Prameha, Sthoulya, Sotha, Kustha* and *Vrana* (Table 8 & Fig. 7)**:** The data shows that *Prameha* Highest incidence of Turbid urine (30%) and Cloudy urine (55%). In *Sthoulya*, predominantly Clear urine (100%), with no incidence of Turbid, Cloudy, or Milky urine. In *Sotha*, mostly Clear urine (90%), with 5% each for Turbid and Cloudy, and no Milky urine. In *Kustha*, predominantly Clear urine (95%), with 5% Cloudy and no Turbid or Milky urine. In *Vrana*, exclusively Clear urine (100%), with no incidence of other categories.

Table 8: Incidence of Urine Clarity in *Prameha, Sthoulya, Sotha, Kustha* and *Vrana*

Clarity	***Prameha***		***Sthoulya***		***Sotha***		***Kustha***		***Vrana***	
	(n=20)		**(n=20)**		**(n=20)**		**(n=20)**		**(n=20)**	
	No of Patient	%	No of Patient	%	No of Patient	%	No of Patient	%	No of Patient	%
Clear	3	15	20	100	18	90	19	95	20	100
Turbid	6	30	0	0	1	5	0	0	0	0
Cloudy	11	55	0	0	1	5	1	5	0	0
Milky	0	0	0	0	0	0	0	0	0	0

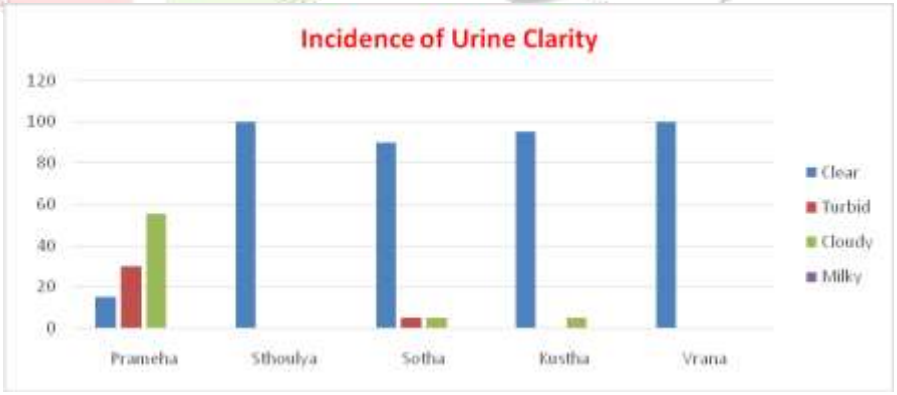

Fig. 7 : Incidence of Urine Clarity in 20 subjects of *Prameha, Sthoulya, Sotha, Kustha* and *Vrana* (n=100)

DISCUSSION: **Assessment of *Vikrita Kleda* in *Prameha*:** *Prameha* subjects shows the highest overall incidence of multiple *Kleda*-related symptoms, which strongly validates the classical Ayurvedic understanding of *Prameha* as a *Kleda-Pradhana Vyadhi* involving *Dushti* of *Mutra, Rasa,* and *Medas*. Similarly, in *Sthoulya* subjects, *Nidradhi Adhikya* (95%), *Kshudha Adhikya* (95%), and *Swasadhikya* (80%) were predominant, reflecting the *Agni-Mandya* and *Medo-dushti* leading to accumulation of *Vikrita Kleda*. In *Sotha* subjects, however, *Kleda Lakshanas* were relatively less frequent, indicating a relatively weaker expression of systemic *Kleda* in edematous conditions. *Kustha* subjects exhibited notable incidence of *Angagandha* (45%) and *Pipasa Adhikya* (25%), which aligns with the classical features of *Bahudoshaja* and *Bahu Kleda Yukta Twakvikaras* in chronic skin diseases. *Vrana* subjects showed mild to moderate involvement, particularly *Angagandha* (20%) and *Nidradhi Adhikya* (20%), suggesting the role of local *Kleda dushti* contributing to wound exudates, delayed healing, and infection.

Assessment of FBS in *Prameha, Sthoulya, Sotha, Kustha* and *Vrana*: In *Prameha* 100% of subjects have high FBS, indicating a strong association with elevated blood sugar levels, consistent with diabetes. In *Sthoulya* 75% have normal FBS, 25% had high FBS, and none are low, suggesting obesity may contribute to elevated sugar levels in a subset of subjects. In *Sotha* 100% have normal FBS, with no high or low cases, indicating no significant blood sugar irregularities in this group. In *Kustha* 90% have normal FBS, 10% had high FBS, and none are low, showing minimal association with abnormal sugar levels. In *Vrana* 95% have normal FBS, 5% have high FBS, and none are low, suggesting a negligible impact on blood sugar.

Assessment of PPBS in *Prameha, Sthoulya, Sotha, Kustha* and *Vrana*: In *Prameha*, 80% have high PPBS, 20% are within normal limits, and none are low, reinforcing the diabetic profile with significant post-meal sugar elevation. In *Sthoulya* 90% have normal PPBS, 10% had high PPBS, and none are low, indicating a mostly normal response with a small elevated subset. In *Sotha* 100% have normal PPBS, with no high or low cases, similar to FBS results, showing no notable sugar irregularities. In *Kustha* 90% have normal PPBS, 10% had high PPBS, and none are low, consistent with FBS findings. In *Vrana* 100% have normal PPBS, with no high or low cases, indicating stable postprandial sugar levels.

Assessment of Urine Colour in *Prameha, Sthoulya, Sotha, Kustha* and *Vrana*: In *Prameha,* 40% of subjects (8/20) have pale yellow urine, 15% (3/20) have dark yellow, and 45% (9/20) have cloudy urine. No other colors are observed. In *Sthoulya*, 100% of subjects (20/20) have pale yellow urine, with no other colors reported. In *Sotha,* 95% of subjects (19/20) have pale yellow urine, and 5% (1/20) have dark yellow urine. In *Kustha,* 95% of subjects (19/20) have pale yellow urine, and 5% (1/20) have cloudy urine. In *Vrana,* 100% of subjects (20/20) have pale yellow urine, with no other colors observed.

Assessment of Urine Clarity in *Prameha, Sthoulya, Sotha, Kustha* and *Vrana*: *Prameha* stands out with a high prevalence of Turbid and Cloudy urine, which may reflect underlying metabolic or renal issues commonly associated with Diabetes Mellitus. *Sthoulya, Sotha, Kustha,* and *Vrana* show a strong trend toward Clear urine, implying these conditions may not typically affect urine clarity unless compounded by other factors. The data suggests that urine clarity could be a useful diagnostic marker specifically for *Prameha*.

CONCLUSION: In the features of *Pramehagata Vikrita Kleda, Avila Mutrata* and *Mutramadhurya* were seen highest in *Prameha* (100% and 75%) respectively. *Pipasa Adhikya* (90%) followed by *Kshuda Adhikya (*95%), *Swasadhikya* (100%), *Angagandha* (85%), *Nidradhikya* (95%) were seen highest in *Sthoulya* patients. Fasting and Postprandial Blood Sugar, Serum Creatinine, Blood Urea, Serum TSH may serve as valuable indicators for assessing *Prameha-gata Vikrita Kleda*. In the present study association of Physical Characters such as Urine Colour, Urine Odour and Urine Clarity with the *Pramehagata Vikrita Kleda* was observed.

REFERENCES:

1. Charaka, Charaka Samhita Vidyotini Teeka with Commentary, By Sastri, Kasinatha and Chaturvedi, Gorakha Natha, Reprint Edition: 2017, Published by Chaukhambha Bharati Academy, Varanasi (India), Volume I, Sutra Sthana, Chapter 27, Annapana Vidhi Adhyaya, Sloka 4, Pg. No.526
2. Charaka, Charaka Samhita Vidyotini Teeka with Commentary, By Sastri, Kasinatha and Chaturvedi, Gorakha Natha, Reprint Edition: 2017, Published by Chaukhambha Bharati Academy, Varanasi (India), Volume 2, Sharira Sthana, Chapter 5, Purushvichaya Shariram, Sloka 5, Pg. No.886.
3. Muhith Abdul & Baishya Anup: Etiopathological study of vikrita kleda with special reference to laboratory parameters. International Ayurvedic Medical Journal {online} 2025 {cited November2025}
4. Chouhan S, et al. Classification of Twenty Types of Prameha – A Conceptual Study. International Ayurvedic Medical Journal. 2022 Sep;9(9):2427–33.
5. Chouhan S, et al. Classification of Twenty Types of Prameha – A Conceptual Study. International Ayurvedic Medical Journal. 2022 Sep;9(9):2427–33.
6. A Critical Appraisal of Daivavyapashraya Chikitsa w.s.r. to Mantra and Homa in Adhyatmika Vyadhis. ResearchGate. 2024 [cited 2025 Aug 16]; reports that in Sushruta Samhita (Sūtrasthāna 24).
7. Agnivesha, Charaka Samhita, Edited by Shastri AD, Revised by Charaka and Dridhabala, Edition: 2017, Published by Chaukambha Bharati Academy, Varanasi, Volume 3, Chikitsa Sthana, Chapter 6, Sloka 6-8, Pg. No. 212-214.
8. Charaka, Charaka Samhita, Sanskrit Text with English Translation, Dr. Shashirekha H.K., Dr. Bargale Sushant Sukumar, First Edition: 2020, Chaukambha Publications, Volume 2, Nidana Sthana, Chapter 4, Sloka 4-6.
9. Sharma U, Sharma A, Joshi HS. Analytical review of meda dhatu dushti in Prameha. Journal of Drug Delivery & Therapeutics. 2023;13(11):161–4.
10. Charaka, Charaka Samhita, Sanskrit Text with English Translation, Dr. Shashirekha H.K., Dr. Bargale Sushant Sukumar, First Edition: 2020, Chaukambha Publications, Volume 2, Nidana Sthana, Chapter 4, Sloka 8, Page No.336.
11. Charaka, Charaka Samhita, Sanskrit Text with English Translation, Dr. Shashirekha H.K., Dr. Bargale Sushant Sukumar, First Edition: 2020, Chaukambha Publications, Volume 2, Nidana Sthana, Chapter 4, Sloka 5-6.
12. Charaka, Charaka Samhita, Sanskrit Text with English Translation, Dr. Shashirekha H.K., Dr. Bargale Sushant Sukumar, First Edition: 2020, Chaukambha Publications, Volume 2, Nidana Sthana, Chapter 4, Sloka 9.
13. Charaka, Charaka Samhita, Sanskrit Text with English Translation, Dr. Shashirekha H.K., Dr. Bargale Sushant Sukumar, First Edition: 2020, Chaukambha Publications, Volume 2, Nidana Sthana, Chapter 4, Sloka 10.
14. Charaka, Charaka Samhita, Sanskrit Text with English Translation, Dr. Shashirekha H.K., Dr. Bargale Sushant Sukumar, First Edition: 2020, Chaukambha Publications, Volume 2, Nidana Sthana, Chapter 4, Sloka 11.
15. Agnivesha. Charaka Samhita, Revised by Charaka and Dridhabala, with Commentary by Chakrapanidatta, Edition: 2017, Published by Chaukhambha Sanskrit Sansthan, Varanasi, Volume 3, Chikitsa Sthana, Chapter 6, Prameha Chikitsa Adhyaya, Pg. No. 451–465.
16. American Diabetes Association. Diagnosis and classification of diabetes mellitus. Diabetes Care.2009Jan;32(Suppl1):S627.Availablefrom: https://pmc. ncbi.nlm.nih.gov/articles/PMC2613584