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Management of *Kardama Visarpa* w.s.r. to Bullous Pemphigoid in a T2DM and HTN Patient:A Case Report

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Abstract :

Bullous Pemphigoid is an autoimmune subepidermal blistering disorder characterized by tense bullae on an erythematous and edematous base. In Ayurveda, this presentation closely related to Kardama Visarpa, a severe Pitta-Kapha predominant dermatological condition involving Tvak, Rakta, Mamsa, and Lasika dushti. Managing Bullous Pemphigoid in patients with uncontrolled Type 2 Diabetes Mellitus and Hypertension have significant clinical challenges due to delayed tissue repair and high risk of secondary infections. A 54-year-old male patient with severe tense bullae, purulent exudate, localized edema, and excruciating pain (Grade 8) on the left lower limb - complicated by secondary Staphylococcus aureus and Klebsiella infection, T2DM (FBS 312 mg/dl), and acute renal strain was managed with a comprehensive Ayurvedic protocol. The intervention combined targeted Shamana Aushadha, Bahiparimarjana Chikitsa (including Panchatiktha Kashayadhara and topical applications) over 18 days of inpatient care. The integrative management led to complete cessation of exudate, resolution of bullae, reduction of visual analog pain score from Grade 8 to Grade 2, and normalization of metabolic/inflammatory markers (FBS down to 123 mg/dl, WBC count reduced from 35,000 to 20,000 cu.mm, and Serum Creatinine normalized from 1.4 to 0.9 mg/dl). Ayurvedic management based on Pitta Kapha Shamana and Vrana Ropana principles offers a safe, highly effective alternative for complex subepidermal blistering disorders complicated by metabolic co-morbidities and drug-resistant bacterial superinfections.

Index Terms **- Bullous Pemphigoid, *Kardama Visarpa, Kashayadhara,* Staphylococcus aureus, Type 2 Diabetes Mellitus.**

I. INTRODUCTION

Bullous Pemphigoid is an autoimmune subepidermal blistering disorder characterized by tense bullae appearing on an erythematous and edematous background. Systemically associated with autoantibodies, drug reactions, trauma, and comorbidities like Diabetes Mellitus, the condition clinically manifests through large, durable blisters (often along skin folds), skin rashes, severe pain, and color changes ranging from pink to dark brown depending on skin tone. Conventional medical management primarily relies on very potent topical steroids, systemic corticosteroids, and anti-inflammatory antibiotics to suppress autoimmune-mediated tissue breakdown[1]. In *Ayurvedic* clinical practice, this presentation correlates closely with *Kardama Visarpa* - a *Pitta-Kapha*-dominated *Tridoshaja* dermatological emergency involving *Rakta*, *Mamsa*, and *Lasika dushti*[2].The presented case details a 54-year-old male with long-standing Type 2 Diabetes Mellitus, Hypertension, and secondary *Staphylococcus aureus* and *Klebsiella* bacterial infection. Through an integrated line of treatment focusing on *Langhana*, *Raktashodhana*, *Kleda-shoshana*, and targeted external therapies (*Bahiparimarjana* like *Kashayadhara* and *Vrana Ropana* topicals), the holistic protocol aimed to resolve active skin lesions, purulent exudates, mitigate severe pain, and normalize systemic biochemical parameters[3].

II.CASE REPORT.

2.1 Presenting Complaints

Multiple skin eruptions and tense fluid-filled blisters over the left lower limb (knee to foot) since 3 days.

Severe throbbing pain (Grade 8/10) and moderate burning sensation (*Daha*) in the left lower leg since 3 days.

Marked lower limb swelling and active fluid discharge (serous to purulent) since 2 days.

2.2 History of Presenting Complaints:

Two weeks prior to admission, the patient experienced high fever and generalized body weakness. He consulted an allopathic physician and received oral medications and an injection. Shortly he started experiencing discomfort. Three days back, skin lesions and blisters developed rapidly on his left leg, initially exuding clear fluid that rapidly converted to yellow purulent discharge associated with debilitating pain.

2.3 History of Previous Illness

The patient had Type 2 Diabetes Mellitus since 25 years, Hypertension since 10 years, Cerebrovascular Disease (CVD) since 4 months, *Viswachi* since 1 year, watering of eyes and hard stools. He had previously been treated for *Viswachi*, watering of eyes, hard stools in our hospital and got temporary relief.

2.4 Treatment History

Metformin 1g 1BD

Tab. Clinidipine 10mg 1OD at morning

Tab. Cilacar 5mg 1OD at night

Tab. Roseday 1OD at night

2.5 Family History

No relevant family history

2.6 Personal History:

Bowel: Irregular

Appetite: Good

Bladder: Regular

Sleep: Disturbed due to severe pain

Diet: Mixed

Addiction: Nil

Allergy: Not yet detected

Exercise: Moderate

2.7. General examination

Blood pressure : 130/80 mmHg

Pulse: 60/min

Respiration rate: 16/min

Temperature: 98.6 F

2.8. Systemic examination

2.8.1. Integumentary System

- Site of lesions: Left Lower limb
- Onset: Acute
- Timing of Pain: Continuous

- Type of Pain: Throbbing, Severe
- Associated Symptoms: Pain associated with a moderate burning sensation and no radiation
- Radiation of Pain: Non radiating pain

2.8.2. Inspection

- Severe swelling present on left lower limb
- Multiple skin eruptions and tense blister formations
- Active fluid discharge (serous to purulent).

2.8.3. Palpation

- Marked localized Tenderness (++)

2.8.4. Special Tests

- Nikolsky Sign: -ve
- Bullae spread sign : -ve

2.8.5. Investigations

2.8.5.1. Blood Pressure Monitoring

- **09/08/2024: Morning:** 130/80 mmHg, **Evening:** 170/80 mmHg
- **10/08/2024: Morning:** 130/80 mmHg, **Evening**: 160/90 mmHg
- **11/08/2024:** 160/90 mmHg
- **12/08/2024 onwards:** Maintained consistently at 130/70 mmHg or 130/80 mmHg

2.8.5.2. Biochemical & Hematological Parameters

Parameter	Date (08/08/24)	Date (09/08/24)	Date (10/08/24)	Date (12/08/24)	Date (14/08/24)	Date (17/08/24)
FBS	312 mg/dL	—	—	—	123 mg/dL	160 mg/dL
RBS	—	338 mg/dL	304 mg/dL	215 mg/dL	—	—
PPBS	432 mg/dL	—	—	—	243 mg/dL	172 mg/dL
Serum Creatinine	1.4 mg/dL	—	1.0 mg/dL	1.0 mg/dL	0.9 mg/dL	—
Serum Uric Acid	9.0 mg/dL	—	—	5.3 mg/dL	5.4 mg/dL	—
Blood Urea	123 mg/dL	—	70 mg/dL	50 mg/dL	36 mg/dL	32 mg/dL
Total WBC Count	35,000 /cu.mm	30,800 /cu.mm	28,000 /cu.mm	26,500 /cu.mm	23,300 /cu.mm	20,000 /cu.mm
Neutrophils	85%	85%	83%	86%	83%	82%
Lymphocytes	9%	10%	11%	9%	11%	12%
ESR	140 mm/hr	132 mm/hr	132 mm/hr	132 mm/hr	130 mm/hr	150 mm/hr

2.8.5.3. Urine Routine Findings

- **Bacteria:** Present on 08/08/2024 → Nil on 10/08/2024
- **Pus Cells:** 3–4 /HPF on 08/08/2024 → 2–3 /HPF on 10/08/2024
- **Epithelial Cells:** 2–3 /HPF on 08/08/2024 → 2–3 /HPF on 10/08/2024

2.8.5.4. Microbiological Culture & Sensitivity Analysis

- **Specimen Source:** Aspiration Fluid from Left Leg
- **Culture Result:** Positive
- **Organisms Isolated:** Heavy growth of *Klebsiella* species and moderate growth of *Staphylococcus aureus*

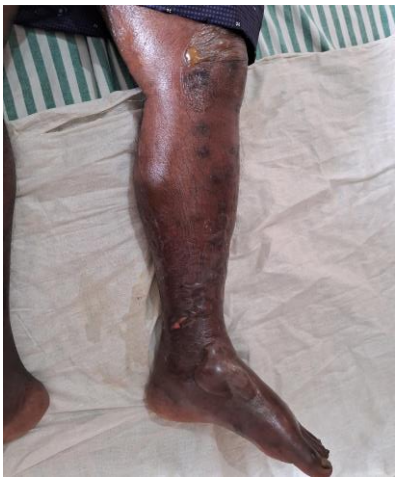

Figure 1: 2nd Day

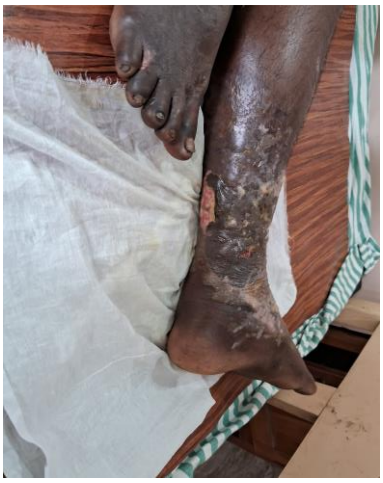

Figure 2: 6th Day

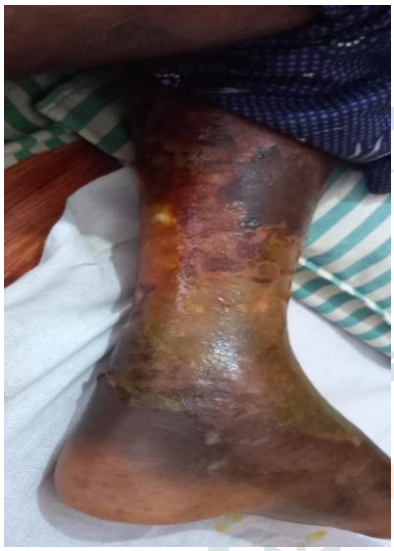

Figure 3: 8th Day

Figure 4: 15th Day

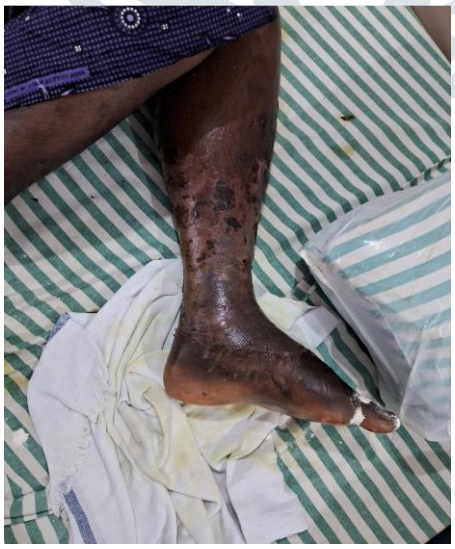

Figure 5: 18th Day

Diagnosis- *Kardama Visarpa - Bullous Pemphigoid (with long-standing Type 2 Diabetes Mellitus, Hypertension and secondary staphylococcus and Klebsiella skin infection.)*

III.Treatment

3.1 Oral medication

Table 1: Timelines And Internal Medication

Date	Medicine	Dosage
7/8/24-24/8/24 (18 days)	1.Mahatikthakam Kashayam	50ml-50ml-50ml(B/F)
	2.Tab. Amruthadi Guggulu	1tds(B/F) with warm water
	3.Tab.Dooshivishari Gulika	1 tds(B/F) with warm water
	4.Guggulu Panchapala Choorna	1 tsp bd (B/F) with warm water
	5.Avipattikara choornam	1tsp at bed time with warm water
	6.Tab.Nimbarajanyadi Gulika	1 tds (B/F) with warm water
	7.Cap. Rumavin	1bd A/F with warm water*1d(9/8) 1tds A/F with warm water*15d(10/8 - 11/8)
10/8/24 -24/8/24 (15days)	8.Tab.Amree plus	1bd A/F with warm water
11/8/24 - 24/8/24 (14days)	9.Neeri KFT Syrup	10ml tds B/F
12/8/24 - 24/8/24 (13 days)	10.Cap.Alert	0-0-2 hs with warm water
	11.Tab.Panion	1-0-0 on 11th, 0-0-2 on 14th, 1 at night*8d(15/8 - 16/8, 18/8 - 19/8) 0-0-2 on 17th&20th with warm water
9/8/24 (1day)	12.Gandharva erandam	10ml A/F with warm water at bed time
11/8/24 - 24/8/24 (9days)	13.Tab.Sallaki 600	1tds A/F with warm water
	14.Tab Normalin	1tds A/F with warm water
7/8/24 -14/8/24 (8days)	15.Tab.Neeri	1-1-0 B/F with warm water
12/8/24-24/8/24 (8days)	16.Ulsant D Syrup	2tsp bd B/F
9/8/24 (1day)	17.Tab Vasulax	2-0-0with warm water
17/8/24,20/8/24 (2days)	18.Manasamithra vataka	2 stat with warm water

3.2 External therapy

Table 2: Timelines And Therapeutic Intervention

External Procedure and External Applications	Date
1.Panchatiktha Kashayadhara(Adhakaya)	3days- once daily(7/8/24 - 9/8/24) After that 14 days twice daily(10/8/24 - 23/8/24) 1day once on 24/8/24
2.Shatadhoutha Ghritam E/A	4 days(first)(7/8/24 - 12/8/24)
3.Ophthacare: 2drops twice daily	12 days(8/8/24 - 24/8/24)
4.WH5 ointment 4 times daily	11 days(13/8/24 - 24/8/24)
5.Jathyadi keram E/A	2 days(23/8/24 - 24/8/24)
6.Cutis powder E/A	13 days(12/8/24 - 24/8/24)

3.3. Advice on discharge

The patient was advised to continue the prescribed oral medications and external applications as adviced:

3.3.1. Discharge Medicine

For 15 days (25/8/24 - 9/9/24)

- Mahatikthakam Kashayam: 50ml-0ml-50ml(B/F)
- Triphala Choornam: 10gm powder boil with 2 litre water and do wash
- Jathyadi Keram E/A before bath
- Cutis powder E/A after bath

- Tab. Panion 0-0-1 at 9pm

3.3.2. Review Medicine

For 20 days(10/8/24 – 30/8/24)

- Mahamanjishtadi Kashayam: 50ml bd B/F
- Triphala choorna for kshalanam over wound before bath
- Ulsant D Syrup: 2tsp bd
- Tab.Normalin: 1bd A/F
- Tab Panion: 0-0-1 at 9pm A/F
- Tab.Sallaki: 600 1-0-0 A/F
- Tab.Amrutha Guggulu: 1bd oral B/F
- Tab.Dooshivishari Gulika: 1bd oral B/F
- Tab.Nimbarajanyadi: 1bd B/F
- Tab.Amree plus: 1-0-0 A/F
- Ophthacare: 2drops twice daily(Eye drops)
- WH5 Ointment: E/A over wound
- Jathyadi Keram: E/A over LL before bath
- Cutis powder: E/A after bath

IV.RESULTS AND DISCUSSION

4.1. Results:

Over the course of the 18-day hospitalization, the patient demonstrated progressive clinical improvement across all primary symptoms. Skin integrity stabilized early, with tense bullae ceasing to spread by Day 3, collapsing into flat erosions by Day 6, and undergoing re-epithelialization by Day 15, culminating in the complete healing of raw areas by discharge on Day 18. Concurrently, inflammatory signs subsided as active purulent oozing was fully controlled within 11 days alongside a steady resolution of severe leg edema. Patient comfort improved markedly over the course of treatment, initial pain reduced from a sleep - disrupting Grade 8 to a mild Grade 2 discomfort, while localized *Daha* was entirely eliminated.

4.2. Discussion

Bullous pemphigoid is an autoimmune subepidermal blistering disorder characterized by tense bullae on an erythematous and edematous background. In *Ayurveda*, these manifestations closely resemble *Kardama Visarpa*, which is caused by the acute aggravation of *Pitta* and *Kapha* Doshas leading to *Dhatu Dushti* involving *Tvak, Rakta, Mamsa, and Lasika*[4].

In the present case, a 54 - year-old male presented with acute, severe blisters, extensive skin eruptions, marked swelling, throbbing pain, burning sensation, and purulent secretions over the left lower limb since three days. The patient had a long-standing history of uncontrolled Type 2 Diabetes Mellitus and Hypertension, and the symptoms appeared following initial treatment for systemic weakness and fever. Microbiological examination of the blister fluid isolated *Staphylococcus aureus* and *Klebsiella* species, while blood investigations revealed marked leukocytosis, hyperglycemia, and elevated renal parameters[5]. Based on the clinical presentation, laboratory findings, and *Ayurvedic* assessment, the condition was diagnosed as *Kardama Visarpa* complicated by secondary bacterial infection and metabolic comorbidities.

Considering the *Pitta-Kapha Pradhana Tridosha* involvement with *Tvak, Rakta, Mamsa, Lasika Dushti*, the treatment plan incorporated *Pitta-Kapha Shamana, Rakta Shodhana, Vrana Shodhana - Ropana*, and management of metabolic markers[2].

The patient was managed with a comprehensive internal medication regimen aimed at pacifying aggravated Pitta Kapha doshas, Rakta Shodhana, controlling metabolic and renal parameters, and promoting systemic anti-inflammatory healing. ***Mahatikthakam Kashayam*** is prescribed at a dosage of 50 ml TDS before food as a premier *Pitta - Rakta* purifier that reduces WBCs, *Daha*, and weeping lesions. ***Tab.Amruthadi Guggulu*** (1 Tab TDS before food) provides *Deepana* and *Pachana* effects, acts as an anti-inflammatory, and *Kleda shoshana*. ***Tab.Dooshivishari Gulika*** (1 Tab TDS before food) neutralizes *Dooshi Visha* and autoimmune hyper-responsiveness. ***Guggulu Panchapala Choorna*** (1 tsp BD before food) facilitates *Vrana Shodhana* and *Ropana*, promoting wound cleansing and healing. ***Avipattikara Choornam*** (1 tsp at bedtime) functions as a mild *Pitta-Rechana* laxative to clear metabolic waste and reduce edema.

Tab. Nimbarajanyadi Gulika is administered at 1 Tab TDS before food as a natural antimicrobial (*Krimighna*) targeting *S. aureus* and regulating blood glucose. ***Tab. Amree Plus*** (1 Tab BD after food) serves as an anti-hyperglycemic polyherbal formulation that controlled FBS from 312 to 123 mg/dl. ***Neeri KFT Syrup & Tab. Neeri*** are given at 10 ml TDS and 1 Tab BD respectively as nephroprotective and *Mutrala* agents, which normalized Serum Creatinine from 1.4 to 0.9 mg/dl. ***Cap. Rumavin***(1tds after food) ***& Tab. Sallaki 600***, taken daily as prescribed, act as natural 5-LOX inhibitors to reduce localized pain (*Vedana*) and systemic inflammatory markers. **Tab.Panion** taken daily as an analgesic, its dosage changes according to the severity of pain. **Tab.Normalin(**1TDS after food)which acts as *Vata Shamaka* and BP regulator. **Ulsant D Syrup** (10ml BD before food) protects gastric mucosa and regulstes acid peptic secretions. ***Tab Vasulax***(2 OD at morning at 6am)which is *Vata Anulomana, Koshta sodhaka*. ***Manasamithra vataka*** (2 STAT for 2days only) balances *Sadhaka Pitta* and *Prana Vata*, supporting cognitive clarity and nervous system health during high inflammatory stress. **Cap.Alert**(2 HS) acts as a natural tranquilizer and brain tonic to promote restful, healing sleep without sleep inertia.

Finally, ***Gandharva Erandam*** is administered as a single 10 ml dose at bedtime for *Nitya Virechana* to clear deep-seated *Pitta-Kleda* toxins.

A comprehensive external treatment protocol comprising *Kashayadhara*, barrier-repair ointments, drying powders, and healing oils was sequentially implemented to control local inflammation, manage wound exudate, and accelerate tissue regeneration through distinct phases of healing. ***Panchatiktha Kashayadhara*** is administered once daily from Days 1 to 3 and twice daily from Days 4

to 17; this procedure involves the rhythmic pouring of a *Kashaya* to reduce local heat, edema, and secondary infection. ***Shatadhoutha Ghritam***, an emulsion of 100-times washed cow's ghee, is applied from Days 1 to 4 to rapidly soothe intense local *Daha* and repair the skin barrier.**WH5 Ointment,** a honey and *Aloe vera*-based formulation, is applied 4 times daily from Days 6 to 18 to stimulate granulation in diabetic wound tissue. **Cutis Dusting Powder** is utilized from Days 5 to 18 to keep ruptured bullae dry, prevent tissue maceration, and act as an antibacterial shield. ***Jathyadi Keram,*** a classic *Vrana Ropana* oil, is externally applied from Days 16 to 18 to promote final epithelialization and prevent scar contracture.

Following 18 days of inpatient Ayurvedic management, the patient showed marked clinical improvement, without any adverse events. The sustained improvement observed in this case suggests that a holistic Ayurvedic approach combining *Shamana Chikitsa, Panchakarma*, particularly *Kashaya dhara* effectively addressed the underlying pathophysiology of *Kardama Visarpa* rather than merely suppressing symptoms. However, further well-designed clinical studies involving larger sample sizes are required to establish the efficacy of this treatment approach in the management of *Kardama Visarpa.*

V. Conclusion:

This case demonstrates that a structured *Ayurvedic* therapeutic protocol - combining *Pitta-Kapha Hara* internal medications with sterile herbal *Dhara* and topical *Vrana Ropana* agents - can successfully achieve remission in severe, complicated Bullous Pemphigoid (*Kardama Visarpa*). The intervention not only healed extensive subepidermal skin lesions and eliminated multi-drug resistant bacterial colonization but also safely managed severe co-morbidities including uncontrolled T2DM and acute renal strain without reliance on systemic corticosteroids.

REFERENCES

1. J. G. H. Dinulos, *Habif's Clinical Dermatology: A Color Guide to Diagnosis and Therapy*, 7th ed. Philadelphia, PA: Elsevier, 2021.pp. 640–648.
2. Agnivesha, Charaka, Dridhabala, *Charaka Samhita*, Ed. Vaidya Jadavji Trikamji Acharya. Chikitsa Sthana, Ch. 21 (Visarpa Chikitsa). Varanasi: Chaukhambha Surbharati Prakashan, 2011.
3. Sushruta, *Sushruta Samhita*, Trans. K.R. Srikantha Murthy. Cikitsa Sthana, Ch. 17. Varanasi: Chaukhambha Orientalia, 2005.
4. Vagbhata, *Ashtanga Hridayam*, Trans. Prof. K.R. Srikantha Murthy. Chikitsa Sthana, Ch. 18 & 19 (Kushta & Visarpa Chikitsa). Varanasi: Chaukhambha Krishnadas Academy, 2014.
5. Y. P. Munjal, Ed., *API Textbook of Medicine*, 9th ed. New Delhi, India: Jaypee Brothers Medical Publishers, 2012, ch. 11, pp. 499–553.