Von-Zumbusch Psoriasis-A Case Study

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***Abstract*—Generalised pustular psoriasis is a distinct variant of psoriasis that is usually preceded by other forms of the disease. It is characterized by fever that lasts for several days and sudden generalised eruption of sterile pustules 2 to 3 mm in diameter. The pustules are disseminated over the trunk, extremities including the nailbed, palm and soles. This paper presents the case of a 32-year-old married male patient who came to OPD 4 of National Institute of Unani Medicine (NIUM) Bengaluru. Clinical Presentation: His chief complaints were pustules with scales all over his body along with generalised weakness, chills and fever for one month. On examination: Multiple pustules on erythematous base with scales were seen all over his body along with fever and chills, moreover multiple joint pain and stiffness was also noticed. Diagnosis: The patient was diagnosed clinically with Generalised pustular psoriasis resembling to Da-us-Sadaf in the Unani system of medicine. Interventions: The patient was treated with Joshanda Munzij Sauda (decoction) and Majoon Ushba (compound formulation) orally alongside with Habb e Suranjan (orally) and Marham Asfedaj + Roghan e Hindi for local application all over body except face. Outcome: Assessment of efficacy was done by GBPASI Score before and after treatment. Conclusion: This Unani formulation effectively improves pruritus, pustules and scaling in Generalised pustular psoriasis and may be considered for complimentary management of it.**

***Index Terms*—Pustular psoriasis,Von-Zumbusch, Da-us Sadaf, Joshanda Munjiz Sauda.**

I. INTRODUCTION

Generalised Pustular Psoriasis (GPP) is a rare, auto-inflammatory form of psoriasis that can be fatal, it causes a great deal of stress for its sufferers. Macroscopic sterile pustules and repeated bouts or flare-ups of extensive cutaneous erythema are its defining features. Systemic signs, such as leukocytosis, tiredness, and high-grade fever, are commonly linked to acute bouts of GPP. Acute GPP (von Zumbusch variation), pregnancy-related pustular psoriasis (formerly known as "impetigo herpetiformis"), annular pustular psoriasis, and infantile/juvenile pustular psoriasis subtypes are other classifications for GPP. From a persistent condition that flares constantly over years to a relapsing disease with recurring flares happening years after the original diagnosis, the clinical course of GPP is diverse. From a persistent condition that flares constantly over years to a relapsing disease with recurring flares happening years after the original diagnosis, the clinical course of GPP is diverse. For a given patient, the intensity of symptoms may also change with each flare. Although GPP flares are frequently idiopathic in origin, a variety of internal and environmental variables, such as pregnancy or corticosteroid withdrawal, are connected to their onset. GPP flares are also linked to bacterial and respiratory viral infections, such as the SARS-CoV-2 virus, in a variety of clinical subtypes and genetic backgrounds. Estimates of the prevalence of generalised pustular psoriasis in the general population range widely, from 1.76 to 124 cases per million.[1]

According to the Unani System of Medicine, “Da-us Sadaf” is formed from the Arabic terms "Daun" and "Sadaf," which mean "disease" and "oyster shell," respectively. Famous Unani physicians Razi, Majoosi, Ahmad Bin Mohd Tabari, Ibn-e-Zohr, Akbar Arzani, and Azam Khan viewed it in the context of Taqashur-e-Jild and Qashaf-e-Jild because of dryness of the skin and scale formation, which clinically resembles psoriasis (Da'u-us-Sadaf). According to Ali Ibn-e-Abbas AlMajoosi, Tabiyat expels the Khilt-e Ghaleez

from internal organs to the skin, causing dryness and itching, but the skin is unable to eliminate the Khilt-e-Ghaleez, resulting in the accumulation of sauda in the skin and the production of Taqashur-e-Jild. Munzijate Sauda (Melancholic concoctives), Mushilate Sauda (Melancholic purgatives), topical application of Jali (detergent), Murakhi (emollient), Murattib and Mohallil (anti-inflammatory) advia are useful in mitigating with the disease. [2]

II. CASE REPORT

A 32-year-old married male came to NIUM OPD, Bengaluru with the chief complaints of multiple pustules with erythema and scaling all over his body along with mild itching, fever and chills for one month.

A. History of present illness

According to patient's statement, he developed some redness followed by pustules on his whole body alongwith mild itching for one month. Then after 20 days he developed fever with chills and the scales got peeled off. He also had a multiple joint pain.

B. History of past illness:

Patient reportedly underwent allopathic treatment (Methotrexate 5mg BD once a week) for one month.
Negative family history for psoriasis.
N/H/O Diabetes, HTN or any other comorbidities.

C. General physical examination

Built - average
Nutrition- average
Height- 176 cm
Weight-72 Kg
Temperature 99.2°F (axillary).
Pulse rate – 80 beats/min.
Blood pressure (systolic and diastolic) 110/70 mm of Hg.
Pallor – absent
Swelling – absent
Clubbing – absent
Cyanosis – absent
Icterus – absent
Lymphadenopathy – absent
Oral examination of mucosal surfaces: no lesion in oral cavity, buccal surface, palate and tongue

D. Systemic examination

Dermatological examination

1. Inspection

Appearance- anxious
Site of lesion: all over body including scalp & ears
Number of lesions: multiple erythematous plaques
Size of lesion: variable
Morphology of lesion: pustules and plaques
Colour of lesion: yellowish-white pustules with erythematous base overlapped with mica-like scales.
Distribution: Symmetrical

2. Palpation

- Moisture- Dryness
- Temperature – Warm to touch
- Texture – Rough
- Central nervous system – patient was well oriented to person, time and place
- Cardiovascular system– S1, S2 are audible with no murmur or added sounds
- Respiratory system – bilaterally chest symmetrical with no added sounds.
- Digestive system- bulky abdomen with centrally placed umbilicus and no tenderness was present.

3. Assessment of Mizaj (temperament)

- Colour of lesion: red and yellowish-white
- Dryness of lesion: moderate
- Duration of lesion: on & off for one month
- On the basis of above parameters this is categorised as Saudavi disease due to morbid melancholic humour, having Barid Yabis temperament

4. Investigations

- Hb- 11.6 gm/dl
- Total WBC- 13540/µl
- ESR- 22 mm/hr
- Sr. creatinine- 0.9 mg/dl
- Uric acid- 8.0 mg/dl
- SGOT- 25 U/L
- SGPT-38 U/L
- Alkaline Phosphatase- 118 IU/L
- Total Bilirubin- 0.82 g/dl
- ASLO- Negative
- CRP- Positive

III. CRITERIA OF ASSESSMENT

GPPASI, (Generalized Pustular Psoriasis Area and Severity Index) the five grades of severity for

erythema, scaling, and pustulation correspond to 0 = clear, 1 = almost clear, 2 = mild, 3 = moderate, and 4 = severe. Each body region's score is determined by multiplying the sum of severity scores by the corresponding BSA score for erythema, scaling, and pustulation, and then multiplying the result by a weighting factor specific to each body region. The final GPPASI score is the sum of the individual scores from everybody region.[3]

Severity

Component score	0	1	2	3	4
Erythema (E)	Clear	Almost Clear	Mild	Moderate	Severe
Pustules (P)	Clear	Almost Clear	Mild	Moderate	Severe
Desquamation (D)	Clear	Almost Clear	Mild	Moderate	Severe

Score

Head	[(E+P+D)] × 0.1
Upper limb	[(E+P+D)] × 0.2
Trunk	[(E+P+D)] × 0.3
Lower limb	[(E+P+D)] × 0.4
GBPASI Score	Range (0-72)

IV. ORAL MEDICINE

1. Joshanda Munzij Sauda[4]: Aftimoon (Cuscuta reflexa full herb), haleela siyah (Terminalia chebula unripe fruit) 5 gram each in decoction form. Patient was advised to soak above medicine (10 gram) in one glass of water (200 250 ml) with 5g Gul e Surkh at night. In the morning, he was advised to boil it till half water evaporates, filter it and drink before breakfast once daily.

2. Majoon Ushba[5] (compound formulation) 6 grams twice daily after food

The ingredients as follows:

S.No.	Name of the drug	Botanical name with part used	Quantity
1.	Post Halela Zard	Terminalia chebula epicarp of half ripe fruite	14 gm
2.	Post Halela Kabuli	Terminalia chebula epicarp of full ripe fruite	17.5 gm
3.	Post Balela	Terminalia Belirica epicarp of full ripe fruite	17.5 gm
4.	Halela Siyah	Terminalia chebula unripe fruit	17.5 gm
5.	Shahtra	Fumaria officinalis herb	17.5 gm
6.	Bisfaij	Polypodium vulgare herb	17.5 gm
7.	Turbud	Operculina trupethum root	17.5 gm
8.	Aftimoon	Cuscuta reflexa full herb	17.5 gm
9.	Amla	Emblica officinalis full ripe fruit	10.5 gm
10.	Barge sana	Cassia angustifolia leaves	35 gm
11.	Ushba	Smiplex ornate herb	60 gm
12.	Shahad(honey)	Apis mellifera	3 times of sum of the above drugs

3. Habb e Suranjan: 2 Tablets twice daily after food

Sibr Saqootri	12 gm	*Aloe barbadensis*
Post Halela Zard	12 gm	*Terminalia chebula*
Suranjan Shireen	12gm	*Colchicum autumnale*

4. Local Application Intervention

1. Marhame Asfedaj[6]for local application mixed with Roghan e Hindi all over the body except face.

S.No.	Name of the drug	Scientific/chemical name	Quantity
1.	Mom safaid/honey bee wax	Apis mellifica	2 parts
2.	Safeda	Lead Carbonate	1 part
3.	Roghane kunjad(compressed oil)	Sesamum indicum	6 parts

2. Roghan e Hindi

S.No.	Name of the drug	Scientific/chemical name	Quantity
1.	Mayeen Khurd	Tamarix gallica	10 gm
2.	Haldi	Curcuma longa	10 gm
3.	Neela Thotha	Copper sulphate	28 gm
4.	Murdar Sang	Plumbi oxidum	10 gm
5.	Halela Siyah	Terminalia chebula Retz	10 gm
6.	Aab Barg Neem	Azadirachta indica	240 gm
7.	Roghan Sarson	Brassica nigra	240 gm

Note: Standard operative procedures (SOPs) for preparation of oral and local medicinal formulations have been adopted.

A. Pre-Treatment:

B. Post treatment:

V. RESULTS

After six months of treatment, the efficacy of Unani compound formulation was evaluated and found clinically significant in the management of Generalised Pustular Psoriasis. The GBPASI score was impressive as it reduced from the initial scoring of 60 to 10 in three months then 5 at the end of the treatment.

VI. DISCUSSION

Generalised pustular psoriasis (GPP) is a rare, auto-inflammatory form of psoriasis that can be fatal, it causes a great deal of stress for its sufferers. Macroscopic sterile pustules and repeated bouts or flare-ups of extensive cutaneous erythema are its defining features.[7] Enormous loss in protein and fluids, leucocytosis, anaemia, increased C-reactive protein and erythrocyte sedimentation rate, electrolyte abnormalities, temperature irregularities, abnormal liver function are generally observed in this type of psoriasis. Our results showed that the symptoms were improved significantly after 1 month of therapy. Consumption of agents with anti-inflammatory, immunomodulatory, antiulcerogenic and antioxidant effects could be helpful in improvement of this disease.[8] Savitha T., et al. stated that Cuscuta reflexa possessed an important phyto bioactive component; lupeol which exhibits antimicrobial, anti-inflammatory, antitumor, antiprotozoal, and chemoprotective activities, and it also antagonist interleukin-4 production by using T-helper type 2 cells.[9] Dolly singh et al. found that Terminalia chebula has wound healing properties by acting keratinocytes and fibroblasts cells.[10]This plant also acquirse multiple pharmacological and medicinal activities like antioxidant, antimicrobial, anti-inflammatory, antimutagenic, antiproliferative, cardioprotective, hepatoprotective.[11] Azad H et al. concluded the efficacy of Majoon Ushba and Roghan e hindi in the management of psoriasis due to their antioxidant, anti-inflammatory, antimicrobial, and blood purifier properties.[12]Majoon Ushba has been used for its mohallil (anti-inflammatory), moaddile sauda, musaffi dum (purifier) properties.[8] Improvement in itching and erythema may be attributed to detergent, demulcent, antimicrobial, anti-inflammatory, moisturizing, pain sedative, and wound healing properties of alum and zinc oxide in the preparation used for local application.[13]

The present case report substantiates the effectiveness of prescribed unani formulation in the management of Da-us Sadaf, which is mainly due to the blood purifier, anti-inflammatory, demulcent, antibacterial, moisturizing, pain sedative, wound healing and emollient properties present in their ingredients. Haleela siyah, and Gul-e-Surkh have been mainly used for munzij and mushil action along with mulattif, mohallil, mufatteh sudad, and musaffi dum properties. Considering the therapeutic properties of the above-mentioned drugs, it seems to be a suitable option for relieving symptoms in patients suffering from GPP

VII. CONCLUSION

This unani formulation effectively improves pruritus, pain, pustules and scaling in GPP and may be considered for complimentary management of it. Further studies with a larger sample size, longer intervention, and follow-up have been suggested.

Declaration of Patient Consent: Taken before recruitment. The authors have no conflict of interest to declare.

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