



Asian Journal of Hospital Pharmacy

Content Available at www.ajhp.online

ISSN: 2583-0724



A CASE STUDY ON: SUBACUTE CUTANEOUS LUPUS ERYTHEMATOUS

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Received: 04 July 2023 Revised: 22 July 2023 Accepted: 28 Aug 2023

Abstract

Subacute Cutaneous Erythematous (SCLE) is an Auto-Immune skin disorder that cause skin sores and rashes when your immune system attacks itself. In this case report describe 39 years old female patient with SCLE. It is characterized by either ring-shaped red scaly border and also scaly red bumps in sun exposed areas associated with itching, pain and burning sensation. In this case, the patient has a multiple red colour lesions initially on the upper back region then spread to B/L UL, abdomen, chest, face and LL which is aggravating to sunlight. The patient is having a history of skin burns like lesions, tuberculomas and SJS. The diagnosis of SCLE was revealed by clinical presentation, Skin biopsy result and laboratory finding i.e. ANA Test was found to be highly positive and confirms that it is an autoimmune disease. The patient was treated with corticosteroid drug, DMARDs along with antihistaminic drugs and supportive therapy like nutritional supplements and skin lotion for external application, which led to significant improvement in the lesion formation and other symptoms. The case report highlights the careful monitoring and appropriate treatment of SCLE.

Keywords: SCLE, SJS, Tuberculoma, ANA test, DMARDs, autoimmune disorder.

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DOI: <https://doi.org/10.38022/ajhp.v3i3.74>

Introduction

Subacute Cutaneous Lupus Erythematous (SCLE) is an Autoimmune disorder also called an inflammatory connective tissue disorder which is characterized by pathogenic autoantibodies, immune complex formation, deposition, and attributed to the loss of immune tolerance. SCLE is presenting a symmetric, non-scarring photosensitive erythematous rash and skin sores usually over sun-exposed areas like the face, neck, arms, upper back, and shoulders associated with pain, itching and burning sensation [1]. The classical precipitating factor is due to sunlight exposure in a patient. SCLE primarily occurs in young to middle-aged females, as compared to males 3 to 4 times more likely to develop the lesions in females and it is highly photosensitive, with 60% to 90% of patients meeting the ACR definition of increased photosensitivity [2].

Case Report

A 39 years old female patient was admitted to the department of DVL (GSL General Hospital and Medical College, Rajahmundry) with the chief complaint of

multiple red colour lesions which is initially started over the upper back region and spread to B/L UL, chest, abdomen, LL and faces which is aggravated to sunlight for 10 days.

She is having a history of burned skin like lesions 15 years back, 4 years back diagnosed with tuberculoma and 1 year back Steven Johnson syndrome for the treatment she has taken inj-dedemoron iv twice a day for 3 days and tab-cyclosporin mg twice a day for 3 days and tab-fluconazole oral twice a week and also stopped because of GI disturbance. She has a history of teetotaler and smoking packets per year.

Observation

Under general physical examination, blood pressure was found to be 120/80mmHg, pulse rate 60bpm, respiratory rate 22/min and temperature found to be afebrile. On systemic examination was found to be normal. On skin biopsy from the upper neck region and upper limb was observed (figure 1 and 3) and sent for skin biopsy on which fig 4 (epidermis -hyperkeratosis irregular acanthosis), fig.5 (perivascular lymphocytic infiltrate) Fig.6 (extravasated RBCs) conforms the SCLE.

Laboratory investigation shows a Hb level 8.6gm/dl% (anemia), WBC count is 6600 cells/cumm (leucopenia), urine ketone bodies are normal, serum sodium 143meq/L, serum potassium 3.7meq/L, serum creatinine 0.9mg/dl,

and ANA test shows strong homogenous staining pattern i.e. RNP / Sm= strong positive(+++), Sm = Strong positive(+++), SSA= borderline(+), PLANA= borderline(+) by those test the diagnosis was made as subacute cutaneous lupus erythematosus. After confirmation of diagnosis the standard treatment was started with corticosteroid drug (tab-wysolone 30mg once a day) and topical corticosteroid lotion along with antihistaminic drug (tab-teizine 5mg once a day), DMARDs drug (tab-HCQ 200mg once a day) and supportive therapy of nutritional supplement and sunscreens lotion and observe a significant improvement in the patient (fig 1 before medication and fig 2 and 3 after medication)

Treatment provided

It is an autoimmune skin disorder. SCLER is no cure for lupus but medication intervention and their lifestyle modification can help to control it. This can occur in the middle age so the treatment should be done carefully with special monitoring and possible precautions should be taken. This patient was admitted in the DVL ward the systematic treatment was started with a corticosteroid drug (tab-wysolone 30mg once a day) and topical corticosteroid lotion (diprobate plus lotion once a day at night) along with an antihistaminic drug (tab-teizine 5mg once a day), DMARDs drug (tab-HCQ 200mg once a day) and supportive therapy like a nutritional supplement (tab-shelcal 500mg once a day at afternoon), protein powder 1 spoon in one glass of water half hour before a meal, acnevit sunscreen apply on skin twice a day morning and afternoon and syp-sucralfate 10ml three times a day was given and kept for observation, the patient shows a significant improvement in the condition of the skin that is shown in Fig 2 and 3.

She was discharged on the 12th day of hospitalization with the oral medication tab-wysolone 30mg once a day for 8 days and tab HCQ-200mg once a day and rest supportive therapy was given. And steroidal drug should be decreased by tapering of dosage 20mg then 10mg and follow-up in the OPD after 8TH days was recommended. She was significantly recovering a lesion and also the CBC count was normal on laboratory findings. By studying a different literature review it was found that the immunosuppressive agent is a second line treatment of SCLER patients refractory to antimalarial therapy supported over the last 15 year in the literature.3-11

Discussion

The present case describes A 39 years old female patient who was admitted in to the department of DVL with the chief complaint of multiple red colour lesion which initially started over the upper back region and spread to B/L UL, chest, abdomen, LL, faces which are aggravating to sunlight since 10 days. The patient was having a history of burned skin like lesions 15 years back, 4 years back diagnosed with tuberculoma and 1 year back Steven Johnson Syndrome for the treatment she is taking inj-

decadron iv twice a day for 3 days and tab cyclosporin mg twice a day for 3 days and tab-fluconazole oral twice a week and stopped because of GI disturbance. The diagnosis of SCLER was made by clinical presentation, Skin biopsy result (epidermis -hyperkeratosis irregular acanthosis, perivascular lymphocytic infiltrate, extravasated RBCs) and laboratory finding i.e ANA Test found strong homogenous pattern positive. The patient was treated with oral corticosteroid (tab-wysolone 30mg once a day) and topical corticosteroid lotion, diprobate plus apply on the skin at night) and DMARDs (tab HCQ-200mg once a day) and rest supportive therapy was given which result in significant recovery along with normal CBC count. SCLER is a rare autoimmune disease that significantly affects in middle age of people with a reported prevalence range from 14 to 60 per 1,00,000 thus it is relatively low in India hence called a rare disease. The clinical presentation of SCLER is characterized by either ring-shaped red scaly border and also scaly red bumps in sun exposed areas associated with itching, pain and burning sensation. Sunlight exposure was the triggering factor to potentiate the SCLER so it is highlighted to avoid it.

The management of SCLER in adults is challenging in the medical field, particularly with those people having several comorbidities and in severe condition. For the management, the symptomatic treatment with systemic corticosteroid drug with topical corticosteroid lotion, DMARDs drug, antihistaminic drug and supportive therapy is usually recommended. However, the optimal dose and duration of corticosteroid drug are unclear and if used for a long period may lead to osteoporosis, other infection and complication.



Fig no. 1 (skin of upper back region before Treatment)



Fig no. 2 (skin of upper back region after Treatment)



Fig. no. 3 (skin of lower limb after medication)

Skin Biopsy Result

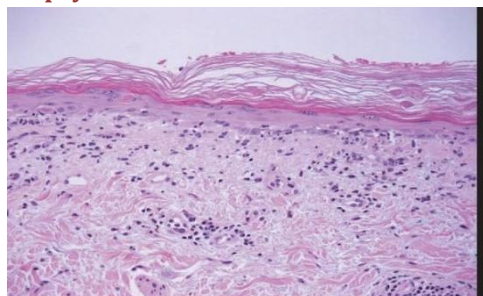


Fig. no.3 (focal hyperkeratosis on epidermis)

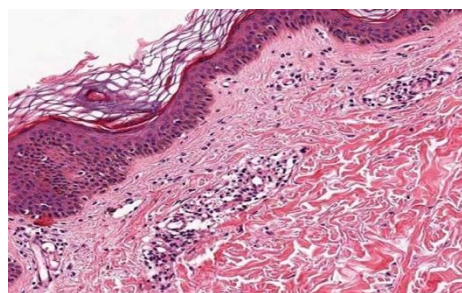


Fig no. 4 (extravasated RBCs)

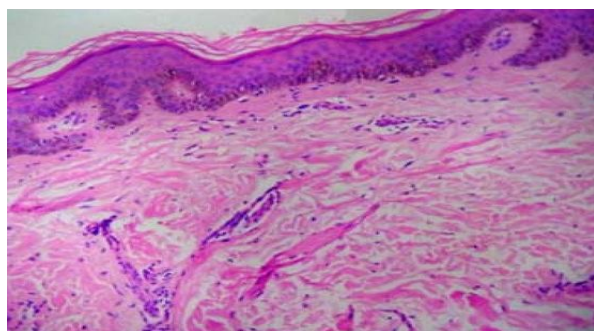


Fig no.5 (perivascular lymphocytic infiltrate)

Conclusion

Subacute cutaneous erythematosus is an auto-immune skin disorder that cause skin sores and rashes when your immune system attacks itself. It is characterized by either ring-shaped red scaly border and also scaly red bumps in sun exposed areas associated with itching, pain and burning sensation. The diagnosis of SCLE was made by clinical presentation, Skin biopsy result (epidermis - hyperkeratosis irregular acanthosis, perivascular lymphocytic infiltrate, extravasated RBCs), laboratory finding i.e., ANA Test found strong homogenous pattern

positive. The treatment with systemic corticosteroid drug with topical corticosteroid lotion, DMARDs drug, antihistaminic drug and supportive therapy result in a significant improvement in lesion formation recovery and was also normal in laboratory findings. More careful monitoring and treatment should be provided to prevent any adverse outcomes of the patient. Early diagnosis and management of SCLE will play a crucial role in recovery of patient outcomes and preventing other complications.

Acknowledgment

The completion of this case study will not be possible without the participation and assistance behind this study. Their contribution is sincerely appreciated because of diligent research that had a continuous observation of patients in the DVL ward and gratefully acknowledged. It's a great pleasure for us to thank everyone who contributed and gave their valuable assistance in the completion of the case report.

We would like to show our gratitude to Mr. Amit Kumar, Associate professor of Aditya College of pharmacy, Suremalem (department of pharmacy practice) for his willingness to help us. He provided us a good environment and valuable information. His timely suggestions with enthusiasm, kindness with moral support have enabled us to complete our case report.

It is a genuine pleasure to express our deep sense of thanks and gratitude to Dr. K. Seetha Ramanjaneyulu Professor and HOD of DVL Department, GSL General Hospital and Medical College, Rajamahendravaram, for his timely advice, valuable guidance, inspiration and encouragement during this study.

We wish to extend my warmest thank to the kind parents of our subject, for allowing us to observe and conduct this study without any hesitation and giving information on the subject daily endeavor. Also, thank you all the other teaching and non-teaching staff member for the kind help and cooperation throughout our follow-up and study. We would like to acknowledge that this case report project was completed by us and not by someone else.

Abbreviation

SCLE: Subacute Cutaneous Lupus Erythematosus
SJS: Steven Johnson Syndrome
LL: Lower Limb
UL: Upper Limb
DMARDs: Disease Modifying Anti-Rheumatic Drug
ANA: Antinuclear Antibody
ACR: Albumin-to-Creatinine Ratio
DVL: Dermatology Venereology and Leprosy
GI: Gastrointestinal
RBC: Red Blood Cells
nRPN: Nuclear Ribonucleic protein
Sm: Smith Antibody
SSA: Sjogren Syndrome Antibody
HCQ: Hydroxychloroquine
HB: Hemoglobin

Funding

No funding

Conflict of interest

All authors declare that no conflict of interest.

Informed Consent

Informed consent was taken from the patient

Author contribution

All author contributed equally

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