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Research article

CASE STUDY AND PATIENT COUNSELING IN AN ADULT PATIENT ON SYSTEMIC LUPUS ERYTHEMATOSUS

R.N.S. Satya sree*, R.N.V. Sai sree, M. Pravallika, T. Sujana, Shaik Fathima

Pharm. D, Kommareddy Venkata Sadasiva Rao Siddhartha College of Pharmaceutical Sciences, Polyclinic Rd, Municipal Employees Colony, Acharya Ranga Nagar, Benz Circle, Vijayawada, Andhra Pradesh, India, 520008.

ABSTRACT

Lupus erythemateux was first coined by Cazenave and Clausit in 1852, yet this condition continues to test the physician's ability to provide safe and effective treatment 150 years later. Systemic lupus erythematosus (SLE) is a multisystemic, chronic disease that affects patients in various ways and over varying time periods. In addition, life-threatening organ involvement may not manifest until irreversible damage has occurred. A 45 year old female patient has presented to the dermatology department on 09-AUG-2022, with complaint of itchy lesions over head and both hands since 8 months, Alopecia and Oral lesions since 8 months. History included consultation with a dermatologist, followed by treatment with Tablet Prednisolone, 10 mg, once daily, Tablet Chloroquine 250 mg, once daily, Tablet Calcium- once daily, Tablet Iron Folic Acid, once daily, Tablet Vitamin C, once daily, Betamethasone cream. On examination patient was conscious and oriented, cooperative, well oriented to time, place and person. Patient was prescribed with appropriate medication and counselled for life style modifications.

Key Words:- Sytemic Lupus Erythematosus, Kerato Conjunctivitis, Life Style Modifications.

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Corresponding Author

R.N.S. Satya Sree
Kommareddy Venkata Sadasiva Rao Siddhartha College of Pharmaceutical Sciences, Polyclinic Rd, Municipal Employees Colony, Acharya Ranga Nagar, Benz Circle, Vijayawada, Andhra Pradesh, India, 520008

E-mail: rachamallanagasatya@gmail.com

INTRODUCTION

Lupus erythemateux was first coined by Cazenave and Clausit in 1852, yet this condition continues to test the physician's ability to provide safe and effective treatment 150 years later (Hakim AJ, *et al* 1998) Systemic lupus erythematosus (SLE) is a multisystemic, chronic disease that affects patients in various ways and over varying time periods. In addition, life-threatening organ involvement may not manifest until irreversible damage has occurred (Boletis JN, *et al* 1999& Isenberg DA, *et al*, 1981). In contrast, although fatigue is not a life-threatening symptom, it is for many the single most debilitating symptom of their disease. Therefore, treatment must be individualised to not only suppress disease activity but also effectively manage symptoms (Caccavo D. *et al* 1997, & Mok CC, *et al* 2001). In addition, it is necessary to use the most appropriate, frequently long-term, drug regimen in consideration of the potential for long-term side effects of the agents used. For instance, some commonly used agents may have effects on fertility (Rubin RL. *et al* 1997& Maini RN, *et al* 1998).

Given that SLE typically affects young women of childbearing age, the outlined therapeutic goals become more difficult. In addition, the physician and his/her multidisciplinary team must recognise and address the background psychological and social impact on a previously healthy adolescent who develops a potentially life-threatening chronic disease (Traynor AE, *et al* 2000). Since antinuclear antibodies were first described in 1957, a great deal of progress has been made in our understanding of SLE. Although the exact cause of

the disease is unknown, it is evident that systemic lupus erythematosus is caused by a combination of genetic, environmental, and hormonal factors, as well as a severe immune dysfunction (Lee SS, *et al* 2008). Some autoantibodies play a role in pathogenesis. The understanding of immunopathogenic mechanisms is evolving rapidly, but the ultimate goal of a safe and effective targeted therapy remains elusive. Thus, the treatment of SLE continues to rely on immunosuppressive agents with a broad spectrum, despite their inherent difficulties. (Bertoli AM, *et al* 2008 & Barnes EV, *et al* 2005).

This article will focus on the pharmacological and other aspects of managing patients with SLE, taking therapeutic goals and patient counseling into consideration.

Case presentation:

Patient:

A 45 year old female patient has presented to the dermatology department on 09-AUG-2022, with complaint of itchy lesions overhead and both hands since 8 months, Alopecia and Oral lesions since 8 months.

Patient was apparently normal 8 months back, present illness started as lesions initially on head and spread to involve both hands and occasional itching and pain.

- H/O large joint pains +
- H/O burning sensation on exposure to skin
- No sinus complaint

MEDICATION HISTORY:

Consultation with a dermatologist, followed by treatment with Tablet Prednisolone, 10 mg, Once daily, Tablet. Chloroquine 250 mg, once daily, Tablet Calcium-once daily, Tablet Iron Folic Acid, once daily, Tablet Vitamin C, once daily, Betamethasone cream.

PAST MEDICAL HISTORY:

- H/O analgesic abuse since 4 years
- No H/O fever/ malar rash
- No H/O dyspnea on exertion/ difficulty in swallowing
- Not a known case of Diabetes mellitus, hypertension, tuberculosis, Asthma and epilepsy.
- No other significant history.

Personal History & Habitat:

- Normal bowel and bladder habits
- Normal sleep and appetite
- Not an alcoholic
- No H/O smoking

Family History:

- Patient had no significant family history with respect to diagnosis.

General Examination:

TEMPERATURE : Afebrile
PULSE RATE : 88/min
RESPIRATORY RATE : 18/min
BLOOD PRESSURE : 120/80 mm Hg

Physical examination:

On examination patient was conscious and oriented, cooperative, well oriented to time, place and person.

SYSTEMS EXAMINATION

RS: NVBS+
CVS: S_1S_2 +
CNS: NFND
GU & GI: soft, No organomegaly

OTHER COMPLAINTS:

On 20/08/2022, patient complaints of burning sensation and irritation of eyes.

Diagnosis: KERATO CONJUNCTIVITIS

DERMATOLOGICAL EXAMINATION:

- Well defined hyperpigmented plaques and papules with adherent white scales on extensor aspect of both arms, fore arms and back.
- Well defined erosions and superficial ulcers present on lower lip.
- Diffuse alopecia of scalp +
- Nails normal
- Oral mucosa- pigmentation of buccal mucosa +

CRITICAL EVALUATION:

- Condition: Systemic lupus erythematosus
- Drug of Choice : symptomatic therapy
- Drugs : Appropriate
- Doses : Appropriate
- Frequency : Appropriate
- Contraindications: Ocular damage
- Drug interactions: Nil
- Guidelines: American College of Rheumatology

Table 1: Medications prescribed

S. no	Drug	Dose	Route	Frequency	D1	D2	D3	D4	D5-D10
1.	Cap. A & D		PO	OD	+	+	+	+	+
2.	T. Vitamin C	500 mg	PO	OD	+	+	+	+	+

3.	**T. Cetirizine**	**10 mg**	**PO**	**OD**	**+**	**-**	**-**	**-**	**-**
4.	**T. Prednisolone**	**5 mg**	**PO**	**OD**	**+**	**+**	**+**	**+**	**+**
5.	**T. Chloroquine**	**250 mg**	**PO**	**OD**	**+**	**+**	**+**	**+**	**+**
6.	**T. Calcium**	**750 mg**	**PO**	**OD**	**+**	**+**	**+**	**+**	**+**
7.	**T. Paracetamol**	**500 mg**	**PO**	**TID**	**+**	**+**	**+**	**+**	**+**
8.	**Moxifloxacin**	**5 ml**	**Ocular**		**+**	**+**	**+**	**+**	**+**
9.	**Carboxy methylcellulose**	**5 ml**	**Ocular**		**+**	**+**	**+**	**+**	**+**
10.	**T. Pantoprazole**	**40 mg**	**PO**	**OD**	**+**	**+**	**+**	**+**	**+**
11.	**T. Iron Folic Acid**	**100mg**	**PO**	**OD**	**+**	**+**	**+**	**+**	**+**

Patient Counseling:

Life Style Modifications:

- Reduce stress
- Avoid sun exposure with clothing and/or sunscreen.
- Follow a low-fat, low cholesterol diet
- Maintain a healthy weight
- Avoid smoking
- Strengthening exercises help keep or increase muscle strength.
- Aerobic or endurance exercises improve cardiovascular fitness, help control weight and improve overall function.
- Prevent infection
- Take adequate rest.
- Optimal blood pressure control
- Avoid high dose estrogen therapy/ oral contraceptives
- Avoid pregnancy

Drug specific counselling for patient:

PANTOPRAZOLE

- It decreases gastric acid secretions
- It should be taken once daily
- It can cause rashes, muscle pain, headache, chest pain, increase in urination, sleeplessness.

Tablet PARACETAMOL:

- It is used to reduce the temperature
- It should be taken 3 times daily.
- It can cause skin rashes, feeling of vomiting, allergies, drowsiness**.**

CHLOROQUINE:

- This is used to relieve your joint and skin symptoms of lupus, such as rash and joint pain.
- It should be taken once daily
- It can cause gastric upset, dizziness, headache, hair loss , retinal damage

T. PREDNISOLONE:

- This is used to relieve your joint and skin symptoms of lupus, such as rash and joint pain.
- It should be taken once daily
- It can cause allergic reaction, rashes

Conclusion:

Despite this, the management of lupus continues to present significant obstacles. Others may show or swiftly develop serious disease with permanent organ damage necessitating immediate administration of broad-spectrum immunosuppressive therapy with its attendant difficulties. Indeed, evaluating the possible benefits of treating active disease against the dangers of therapy-induced side effects is typically the most difficult decision for many, and every intervention requires the patient to be fully informed of potential hazards. Rapid biotechnology advancements have resulted in the production of specific targeted therapies, many of which are currently in the clinical testing phase.

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