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AN INSIGHT TO SYSTEMIC LUPUS **ERYTHEMATOSUS (SLE) THROUGH AYURVEDA**

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ABSTRACT:

Autoimmune disorders are the condition in which the body's immune system destroys healthy cells. Systemic lupus erythematosus (SLE) a chronic auto immune disease of unknown origin results in the formation of auto antibodies, which cause widespread tissue damage and inflammation in the affected organs. In India, the prevalence ranges between 14 to 60 cases per 100,000 people. The lack of specificity in the early signs and symptoms of SLE, as well as the fact that it can affect people of all ages, including children, makes the diagnosis challenging.

The Raktapradoshaja Vikaras, with symptoms viz Mukhapaka, Dourbalya, Siroruk, Raktapitta, Angamarda, *Indralupta, Agnisada*, and *Jwara* as described in Ayurvedic treatises, can be compared with the symptoms of SLE. Due to the *Nidanas* stated, *Vata* and *Pitta Doshas* gets vitiated resulting in *Agnidushana*. The *Apakwa* Anna becomes Amla in Rasa leading to Anna Visha. When this Vishamsa of Anna combines with Dosha, Dhatus and Malas leads to different diseases. Raktapradoshaja Vikaras can be treated with, Upavasa, Raktamokshana Virechana and Raktapittahara kriya.

Keywords: Ayurveda, SLE, Raktapradoshaja Vikaras

INTRODUCTION

Auto-immune disorders¹ are distinguished by an aberrant immune reaction to a healthy body part, where this body reaction depends on genetic, viral, and environmental factors. They share symptoms with one another and with other illnesses, hence the diagnosing has become challenging. The most prevalent multisystem connective tissue disease, Systemic lupus erythematosus² (SLE), is the disease of unknown etiology in which organs and cells undergo damage initially mediated by tissue binding auto antibodies and immune complexes. It has high morbidity and mortality rates with more cases of women compared to men.

According to Ayurveda, the *Mithya Ahara*, *Vihara Chesta*, *Virudha Ashana* etc results in the derangement of the normal body physiology later manifesting into *Vyadhi*. SLE can be considered under the purview of *Raktapradoshaja vikara* with its symptomatic similarity and refers to the pathological effects of *Rakta Dhatu*'s vitiated state. Here an attempt is made to analyze the manifestation of SLE with the principles of Ayurveda.

SYSTEMIC LUPUS ERYTHEMATOSUS (SLE)

SLE commonly referred to as lupus, in which the immune system attacks its own tissues, causing widespread inflammation and tissue damage in the affected organs. Parts of the body that can be impacted by lupus can include the skin, blood, joints, kidneys, brain, heart and lungs.

Skin: Skin problems are a common feature with a red rash over cheeks and on the bridge of nose which worsen on exposure to sunlight. Hair loss and mouth ulcers are found to be common in this condition.

Blood: Blood involvement can happen with or without other symptoms. The changes in blood counts may contribute to symptoms of fatigue (low red blood cell count, anemia), serious infections (low white blood cell count), or easy bruising (low platelet count). In lupus blood clots may develop associated with the production of antiphospholipid antibodies (proteins that can increase the tendency of blood clot).

Joints: Arthritis is a common symptom in SLE, with or without swelling associated with morning stiffness.

Kidneys: Kidney disease is usually asymptomatic and is life threatening associated with arthritis, rash, fever and weight loss.

Brain: Brain involvement is rarely observed when present it can cause confusion, depression, seizures and rarely Cerebro vascular accident (CVA).

Heart and lungs: Heart and lung involvement is often caused by inflammation of the covering of the heart (pericardium) and lungs (pleura) and may develop chest pain, irregular heartbeat and build up of fluid around the lungs (pleuritis or pleurisy) and heart (pericarditis).

CAUSES

The cause of lupus is currently unknown.

- **Hormonal changes**: Women (at the reproductive age of 15 to 44 years) are more likely to get affected by SLE, and can be due to increased Estrogen levels at this age. Increased Estrogen levels tend to push the immune system signals towards autoimmunity through stimulation of antibodies.
- Environmental factors: Exposure to sunlight, micro organisms viz, bacteria, viruses etc and increased stress levels can trigger the disease manifestation.
- **Genetic factor**: Any family history of SLE increases the risk of getting the disease.

SYMPTOMS

- Fatigue
- Headache
- Bleeding problems
- Hair loss
- Loss of appetite
- Fever
- Malar Rash(butterfly rash)
- Discoid rash (round skin lesions)
- Photosensitivity
- Oral ulcers

SLE is confirmed, if any four or more of the above symptoms are present in an individual

PATHOGENESIS⁴

Exposure to environmental factors such as UV-B radiation, infections, and toxins triggers a loss of immune tolerance in individuals and leads to activation of autoimmunity. The antigens of the body on combining with the immune cells, from an increased apoptotic cell (a type of cell death in which a series of molecular steps in a cell lead to its death) which initiates a feed-forward loop between innate and adaptive immunity. The production of auto antibodies and immune complexes, with auto reactive T cells and B cells, complement activation, and cytokine release result in widespread tissue damage, leads to manifestation of SLE.

PROGNOSIS

For the majority of people with early diagnosing can expect to live a normal life span as there is no medicine for complete cure of SLE, and certain conditions are found to be fatal.

MANAGEMENT

To treat the symptoms -NSAIDs, anti-malarial agents, and corticosteroids are commonly used.

- Mild analgesics or NSAIDs These drugs are used to alleviate musculoskeletal pain, swelling, and aches and possess pain reducing, anti-inflammatory, and anticoagulant properties
- Oral corticosteroids: These drugs decrease the swelling and pain associated with inflammation, which can occur in a lupus flare.
- Immunosuppressive drugs- when other drugs fail to respond, and the symptoms do not improve immunosuppressants are given.

RAKTAPRADOSHAJA VIKARAS

Out of the *Sapta Dhatus*, *Rakta Dhatu* is reasponsible for *Preenana* (Sustenance of life) in the body and is predominant of *Agni* and *Apya Mahabhuta*. The knowledge on *Nidana*, *Lakshnas*, *Samprapti*, *Sadya-asadhyata* of *Raktapradoshaja Vikaras* are required for the proper management of the disease condition.

NIDANA OF RAKTAPRADOSHAJA VIKARAS⁵:

The etiological factors which can vitiate the Rakta are - intake of excessive Tikshna(dryness), Ushna(hot), intake of Madhya (alcohol); intake of Lavana(salt), Kshara(alkaline), Amla(sour), Katu(spicy) Rasa; Kulatta(horsegram), Masha (urad dal), Nishpava(type of pulses), Tila Taila(sesame oil), Pindalu(yam), Mulaka(tuber), Haritha (green vegetables), Jalajamamsa (meat of aquatic animals), Anupamamsa, (meat of animals from marshy lands) and *Prasahamamsa* (animals living in holes) *Dadhi* (curd), *Amla Mastu* (sour whey), Shukta(vinegar), Sura(wine), Souviraka(type of alcohol), Viruddhahara(foods with contradictory qualities), Upaklinna ahara(rotten), puti(putrified food items), Diwaswapna(day sleep with intake of guru, snigdha and excessive Krodha(anger), Atapasevana food), (exposure sun and fire). Chardi Vegavarodha(suppression of vomiting urge), absence of Raktamokshana specifically Sharat ritu, Shrama(excertion), Abhighata(external injury) Adhyashana(excessive food intake), Ajeernashana (intake of food before the digestion of previous meal) and by the nature of *Sharat Ritu*.

Raktavaha Srotus⁶ gets vitiated due to the intake of Vidahi Anna (food) and Pana(drinks), Snigdha(unctuous) Ushna(hot) Drava(liquid), and exposure to Atapa(sun) and Anala(fire).

DISEASES CAUSED BY VITIATED RAKTA7:

According to Acharya Charaka, *Raktapitta*(bleeding disorder), *Vaivarny*a(pallor), *Agnisada*(reduced power of digestion), *Atidowrbalya*(excessive weakness), *Siroruk*(headache), *Tikta*(bitter), *Amla* (sour)*Rasa* on indigested food and drinks, *Krodha*(anger), Lavanasyata(salt taste in mouth), *kandu*(itching),

pidaka(eruptions). If the curable diseases do not get cured by *Seeta*(cold), *Ushna* (hot), *Snigha*(unctuous), *Ruksha*(dryness), and other therapies they are to be taken as diseases due to *Rakta vriddhi*.

Acharya Vaghbhata⁸, explains the diseases of *Rakta Dhatu* vitiation viz *Jwara*(fever) in addition to other symptoms.

Acharya Susruta⁹ states *Angamarda*(body pain) and *Indralupta*(hair fall) in addition to the diseases mentioned Acharya Charaka and Vagbhata.

SAMPRAPTI¹⁰:



CHIKITSA¹¹:

The methods through which the *Doshas, Dhatus*, and *Malas* of the body revert back to the stage of normalcy by losing their morbidity are to be known as *Chikitsa*. According to Acharya Charaka the treatment of *Raktapradoshaja vikaras* are explained as:

Virechana(purgation therapy) and Raktamokshana (bloodletting therapy) Upavasa(fasting)

Raktapittahara chikitsa.

According to Acharya Ganghadhara¹², *Raktamokshana*(bloodletting), *Virechana*(purgation therapy), *Anuvasana* (oil enema) and *Raktapittahara kriya*.

SADHYA- ASADHYATA¹³:

Features of *Krichra sadhya vyadhi*(diseases curable with difficulty):

According to Acharya Charaka, *Nimitta*(causative factors), *Purvarupa*(premonitory symptoms), *Rupa*(symptamatology), are of *Madhyama bala*(moderate strength),the qualities of any one of the *Kala*, *Prakriti*, *Dhatus* are favourable to the disease, affected to *Bala*(children), *Vriddha*(old aged), *Garbini*(pregnant women), *Upadravas*(complications) present *Anavam* (not recent onset), *Dwipadham*(extend to two systems), and involves *Dwidoshas* are said to be *Krichra Sadhya*.

Features of *Yapya vyadhi* (manageable diseases):

Acharya Charaka states that diseases persist for the remaining period of life, managing with medicines along with proper following of *Pathya Ahara Vihara* (wholesome food and regimen) aggravates on *Apathya Ahara Vihara*, *Bahudhatustham*(more *Dhatus* invoved), *Nithya*(continuous for long time), *Dwidoshaja* (involve two *Doshas*).

MATERIALS AND METHODS:

Study design: Literary study

The sources for this article's materials which include *Raktapradoshaja Vikaras*, and SLE, are collected from Charaka Samhita, Susruta Samhita, Ashtangahrudaya, other Ayurvedic books, modern books, internet, research papers and journals.

DISCUSSION:

For the body to be in the balanced state, *Dosha*, *Agni*, *Dhatu*, and *Mala* must be in equilibrium. The vitiated *Doshas*, *Dhatus*, or *Malas*, results in reduced *Agni* lodges in the body produce the symptoms of the *Vyadhi*.

* RAKTAPRADOSHSJA VIKARAS IS IT COMPARABLE WITH SLE?:

However, there is no specific diagnosis or name is given for SLE in Ayurveda, perhaps, Ayurveda classics consider it under *Raktapradoshaja Vikara*. As a name for the disease is not mandatory and they can be analyzed and treated based on their symptoms, even SLE can be followed in the same way.

The symptoms of SLE can be grossly compared with the symptoms of Raktapradoshaja vikara as;

SLE	RAKTAPRADOSHAJA VIKARA
Fatigue	Durbalata
Headache	Siroruks
Bleeding problems	Raktapitta
Mouth ulcers	Mukhapaka
Joint pain	Angamarda
Hair loss	Indralupta
Loss of appetite	Agnisadana
Fever	Jwara
Skin rashes	Kushta

❖ COMPARISON OF THE SAMPRAPTI OF SLE WITH RAKTAPRADOSHAJA VIKARAS:

The *Nidana, Samprapti, Lakshanas, Chikitsa*, and *Sadhyaasadhyata* need to be investigated in order to get a thorough knowledge of SLE with *Raktapradoshaja Vikaras*. A direct comparison of SLE's pathology cannot be meaningful without considering the other characteristics of SLE.

Based on the Cause: The environmental factors like exposure to sunlight can be compared with the *Atapa* sevana told in the *Nidana* of *Raktapradoshaja Vikaras*.

Based on the Symptoms: Symptoms are observed to be similar in both. Loss of appetite, fever is the symptoms in SLE which implies the presence of *Ama* in the condition.

* TREATMENT MODALITY FOR SLE WITH RESPECT TO RAKTAPROSHAJA VIKARAS:

Upavasa: In *Raktapradoshaja Vikara* due to the *Mityahara Vihara* the *Agnidushana* happen, where *Upavasa* one among the *Langhana Chikitsa* is advised. In the presence of *Ama* in any disease *Upavasa* is the first line of treatment¹⁴.

Rakta mokshana: Rakta mokshana is done in vitiated condition of Pitta and Rakta with Vata Dosha Anubandha. Siravyadha can be a probably mode of Raktamokshana. After removal of DushtaRakta, normal Vata Gati is restored. Due to removal of Rakta which is Asraya Sthana of Pitta, the symptoms get relieved.

Virechana: *Virechana* is indicated in the elimination of vitiated *Doshas*, particularly *Pitta Dosha*, from *Koshta*. After which the *Samsarjana Krama* is done for 3 to 7 days by which *Agni* is brought back to normalcy with gradual administration of solid food.

Anuvasana Basti: Anubasana Basti is indicated in the elimination of of Doshas especially Vata Dosha from Pakwasaya¹⁵. Susruta quotes that Basti can reach the Rakta Dhatu in 5th day there by preventing further vitiation¹⁶.

Raktapittahara chikitsa: The shamana line of treatment indicated in Raktapitta chikitsa¹⁷which involve Nidana Parivarjanam (avoiding the causes for disease), Sthambanam (In case of Aksheena, Bala and Mamsa), Upavasam, Virechanam are indicated.

CONCLUSION:

According to Ayurvedic literature, Raktapradoshaja Vikaras are caused due to the vitiation of Rakta and Pitta Dosha. As per our understanding, SLE can be compared with Raktapradoshaja Vikara. The direct comparison of Pathogenesis of SLE with Raktapradoshaja Vikaras without considering other characteristics viz Nidana, Lakshana etc cannot be meaningful. In the treatment of SLE, Raktapradoshaja chikitsa which involve Upavasa as the first line of treatment thereby helps in Ama Pachana. Virechana in which the elimination of Doshas especially Pitta Dosha is observed. Raktamokshana where the Dhusta Rakta gets removed thereby reducing the symptoms. Anuvasana Basti can be an ideal mode of treatment where Sneha can remove the vitiated Vata Dosha and nourish the Dhatus. The shamana line of treatment can be done following Raktapittahara Chikitsa. The treatment procedures explained in Raktapradoshaja Vikara can thereby improve the condition of SLE.

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