

CLINICAL STUDY OF 37 COLLECTED CASES OF ACUTE SYSTEMIC LUPUS ERYTHEMATOSUS IN CHULALONGKORN MEDICAL SCHOOL

Sunit ChermSirivathana, M.D.*

Songsakdi Phisithkul, M.D.*

Systemic lupus erythematosus (SLE) is a disease with varied clinical manifestations associated with lesions of connective tissue in the vascular system, the dermis and the serous and synovial membranes.⁽¹⁾

The concept that systemic lupus erythematosus is an autoimmune disorder has arisen from the demonstration of abnormal gamma globulins in the serum which behave in many respects as antibodies. They react with constituents of the cell nucleus (antibodies to nuclear components).⁽²⁾ Certain of these "auto-antibodies" such as those to erythrocyte antigens or platelets, can give rise to a hemolytic anemia or thrombocytopenia that may occur in systemic lupus erythematosus, and the antinuclear antibody has been demonstrated in the glomerular lesions. The LE cells and hematoxylin body develop in presence of 7S gamma globulin in the serum but only in conditions of anoxia or circulatory ischemia. In diagnosis LE cell is very

important and positive about 80% of the cases. When LE cell test, fluorescent antibody test, and complement fixation are employed 98% of the patients with the disease will show a positive result to one of the three. The main symptoms may be cutaneous, gastro-intestinal cardiovascular, renal, articular, hematological, pulmonary among others, often in various combination. In addition the disease may be acute and severe with high fever, or may appear as subacute or subdud picture.^(2,3)

During the period between 1959 to 1967, a total of 37 cases of clinically diagnosed SLE was collected.

Result

The ratio of female to male was 11:1. The lowest age was eleven years and the oldest, 56 with a mean of 20.30 years. Thai and Chinese were found in a ratio of 7:2. The course was from 1½ to 7½ months.

* Department of Medicine, Faculty of Medicine, Chulalongkorn University. 17 collected cases of Systemic Lupus Erythematosus, read at the 10th Pacific Sciences Congress in Hawaii in 1961.

20 more cases were added to the above data by Dr. Songsakdi Phisithkul and read before the resident seminar of Chulalongkorn Medical School Bangkok, Thailand.

Table I **Constitutional symptoms in percent**

Fever	62
Edema	46
Anorexia, malaise	40
Headache	27
Joint pain	24
Dyspnea	11
Bleeding	13
Alopecia	13
Muscular pain	13
Nervous system involvement	11
Weight loss	11

Table II **Symptoms and signs of SLE in percent**

Cutaneous	95
Articular	19
Lymphatic	30
Serosal	24
Nephro-pathy	54
Neurological	22
Mucosal	40
Vascular	46
Pulmonary	46
Cardiac	35
Gastro-intestinal	13

Table III **Blood :**

Hemoglobin		
Hemoglobin in gm. %		Number of cases
5 - 6 gm. %		2 cases
6 - 7 gm. %		2 cases
7 - 8 gm. %		5 cases
8 - 9 gm. %		10 cases
9 - 10 gm. %		10 cases
10 - 11 gm. %		3 cases
11 - 12 gm. %		4 cases
12 - 13 gm. %		1 cases
Total		37 cases

Red blood cells

R.B.C. in millions per cu. mm.	Number of cases
1 - 2 millions	2 cases
2 - 3 millions	10 cases
3 - 4 millions	15 cases
4 - 5 millions	4 cases
Total	37 cases

The average means of red blood cells are between 2-4 millions.

White blood cells

W.B.C. par cu. mm.	Number of cases
2,000 - 3,000	3 cases
3,000 - 4,000	8 cases
4,000 - 5,000	5 cases
5,000 - 6,000	6 cases
6,000 - 7,000	5 cases
7,000 - 8,000	3 cases
8,000 - 9,000	3 cases
9,000 - 10,000	1 cases
10,000 - 20,000	2 cases
20,000 - 30,000	0 cases
30,000 - 40,000	1 cases
Total	37 cases

Average of the white blood cells are from 3,000 - 8,000. per cu.mm.

The Sedimentation rate are increase

The Albumin globulin ratio are reversed

The Serologic tests for syphilis are 7 % positive

The L.E. Cell test are 82 % positive

Table IV Urine :

Albuminuria are between	1 - 2 +
Granular cast	51 %
Hyaline cast	30 %
Skin biopsies are usually positive	

Discussion:

SLE is the disease of the woman in the 2nd. and 3rd. decade of life, the lowest age found in this collection is 11 and the highest age is 56 years. It is found in Thai more than in Chinese in the ratio of 7:2. Most of the occupation of the patients is house wife. The duration of life is from $1\frac{1}{2}$ - $7\frac{1}{2}$ months after the diagnosis is made.

From table 1 the detail enumeration of the constitutional symptoms is listed, fever, edema, anorexia and malaise, headache, and joint pain are the main constitutional symptoms. The symptoms and signs of fully developed disease was characterized by one or more of the symptoms listed in table 2. From this table the skin is affected most, this is because this collection was made from the section on Dermatology. The most typical cutaneous manifestation was erythematous and telangiectasia with varying degree of bluish discoloration. Few patient showing purpuric lesions look like Erythema multiforme, at the face (cheeks and the bridge of the nose, butterfly distribution). Besides this it may be found on the skin of the hands, fingers, limbs, trunk, and back.

Nephropathic symptoms: The changes were proteinuria, hematuria, and granular and hyaline cast in the urine. Some of the patients show a symptoms look like nephrotic syndrome.

Vascular symptoms: The blood pressure was normal in most cases, except in those with renal involvement there

will be high blood pressure. Few patient show purpura look like idiopathic thrombocytopenic purpura. Eyeground changes have been frequent, the most common findings was edema, haemorrhage about the optic disc, and a very few cases of nodular cotton wool exudate.

Pulmonary symptoms: Pulmonary infiltration, pneumonitis, and pleural effusion were observed.

Mucosal symptoms: Bleeding and telangiectasia of the mucous membrane of the lips, nose, eyes, anus were also found.

Cardiac symptoms: tachycardia, the murmurs were systolic, but diastolic murmurs may be present. Most of the cases showed cardiac hypertrophy which were confirmed by x-rays.

Lymphatic symptoms: Enlargement of the lymph glands were frequently observed. Few of the patients have splenomegaly.

Neurological symptoms: We have not found neurological symptoms as frequent as has been claimed. There were convulsions, hemiplegia, and psychic manifestations consisting of delirium, depression.

Articular symptoms: Joint pain resembled Rheumatism and Rheumatoid arthritis were noted.

Summary

37 cases of Systemic lupus erythematosus are described in detail. The symptoms complex as described together

with the laboratory findings of anemia, leucopenia, albuminuria make one suspicious of Systemic lupus erythematosus. LE phenomenon in the peripheral blood clot is most dependable diagnostic test, but further investigations of immunologic reactions for diagnosis are encouraged.

References :

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tosus. The American Journal of Medicine. 25 : 409, 1958.

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3. Jaday, M.S., et al : L.E. Cell Phenomenon. The Journal of Indian Medical Association. 48 : 199, 1967.
