

# Systemic Lupus Erythematosus, clinical epidemiological follow-up.

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**INTRODUCTION:** In the group of rheumatic diseases, the collagenases ones play a very important role and without doubt, Systemic Lupus Erythematosus (SLE) is one of the most frequent. Its origin goes back to the ancient time, being recognized for the first time in the Middle Age, with the description of the dermatological manifestations of the disease. The term Lupus is accredited to Rogerius, a doctor of the XX century, who used the terminology to describe the classic malar erythema. The neoclassic period was announced with the recognition by Móric Kaposi in 1872 of the systemic manifestation of the disease. 1, 2, 3  
Lupus is an autoimmune disease of chronic course, unknown cause, with several clinical multisystem manifestations, as an answer to the production of multiple immune complexes that act with inflammatory answers in different organs and tissues. 4- 6  
It usually starts slowly, with the appearance of new symptoms progressively during an undefined period of time, months can run until doctors get to the diagnosis and once diagnosis is made, the patient can live for many years. There will be periods of weeks, months or even years in which the disease won't be in an active way, thus these periods are called as remissions. When lupus is active, as in the beginning, it can be unpredictable and very dangerous; therefore these periods are called as relapse or exacerbations. 5, 7-10  
In the 50's decade, the majority of patients diagnosed with systemic lupus erythematosus lived less than 5 years, however, advantages in the diagnosis and treatment have been made lately, increasing the survival of many patients, where more than a 90% of cases show a higher survival, getting more than ten years some patients and many of them can live without symptoms relatively. The most common cause of death is the infection due to immunosuppression as a result of medication used to control the disease. 9, 10  
It is estimated that at least 5 million people all over the world have lupus and there are more than 100.000 new diagnosed cases every year. Only in Spain about 20.000 people live with this illness, being a disease twice more frequent than leukemia and ten times more frequent than hemophilia, a diagnosis of a person with lupus can last several years since the symptoms are very similar to other common diseases. 8, 9, 10

**OBJECTIVE:** To characterize the patients with systemic lupus erythematosus from the clinical and epidemiological point of view.

**METHODS:**

An observational, descriptive, transversal and of development investigation was carried out at "Arnaldo Millán Castro" Clinical Surgical University Hospital of Villa Clara, Cuba. The population of study was formed by all the patients with diagnosis of systemic lupus erythematosus older than 18 years of age that had been assisted from January 2010 to December 2019. The sample was selected of improvable criteria way being formed by 162 patients that accomplished the following conditions:

Criteria of inclusion:

-To be a patient with diagnosis of systemic lupus erythematosus (clinical, analytical, immunological).

-Presence of personal clinical charts in the hospital files with enough and needed data for the development of this investigation.

Criteria of exclusion were related with:

-Patient with diagnosis of this disease that was admitted due to other causes not related with SLE.

**RESULTS:**

**Table 1. Distribution of patients by sex and age groups.**

| Age groups | Sex    |      |      |     | Total |       |
|------------|--------|------|------|-----|-------|-------|
|            | Female |      | Male |     | No.   | %     |
|            | No.    | %    | No.  | %   |       |       |
| 19 - 29    | 36     | 22,2 | 2    | 1,2 | 38    | 23,5  |
| 30 - 39    | 51     | 31,5 | 3    | 1,9 | 54    | 33,3  |
| 40 - 49    | 29     | 17,9 | 2    | 1,2 | 31    | 19,1  |
| 50 - 59    | 21     | 13,0 | 0    | 0,0 | 21    | 13,0  |
| Over 60    | 18     | 11,1 | 0    | 0,0 | 18    | 11,1  |
| Total      | 155    | 95,7 | 7    | 4,3 | 162   | 100,0 |

Source: Clinical charts. Sex:  $X^2=85,75$   $p=0,000$  Age groups:  $X^2=31,40$   $p=0,000$

Table 1 Shows the distribution of patients according to age groups and sex, where it was stated that the female sex prevailed with 155 patients, for a 95,7 % and the age group of 30 – 39 for a 31,5%.

There were very significant differences when comparing ration of patients by sex.

There were very significant differences when comparing ration of patients by age groups.

**CONCLUSIONS:**

Patients between 30 and 39 years of age were the most representative with a higher incidence in white and female patients. High blood pressure prevailed as previous history and coffee as toxic habit. Infections were the main cause of hospitalization. There was a higher affection of the osteomyoarticular system followed by skin and mucosa. Prednisone and Azathioprine were the most widely used medications at the time of diagnosis. Infections were the main cause of death.

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**Table 2. Distribution of patients according to age groups and skin color.**

| Age groups | Skin color     |      |                    |      | Total |       |
|------------|----------------|------|--------------------|------|-------|-------|
|            | White patients |      | Not white patients |      | No.   | %     |
|            | No.            | %    | No.                | %    |       |       |
| 19 - 29    | 28             | 17,3 | 10                 | 6,2  | 38    | 23,5  |
| 30 - 39    | 33             | 20,4 | 21                 | 13,0 | 54    | 33,3  |
| 40 - 49    | 19             | 11,7 | 12                 | 7,4  | 31    | 19,1  |
| 50 - 59    | 14             | 8,6  | 7                  | 4,3  | 21    | 13,0  |
| Over 60    | 12             | 7,4  | 6                  | 3,7  | 18    | 11,1  |
| Total      | 106            | 65,4 | 56                 | 34,6 | 162   | 100,0 |

Source: Clinical charts.  $X^2=10,95$   $p=0,001$

Table 2 Represents the distribution of patients according to age groups and skin color, where the predominance of white patients is observed with 106 cases for a 65,4 % and the age group of 30-39 with 54 patients for a 33,3%.

There were very significant differences when comparing ration of patients by skin color.

**Table 5 Distribution of patients according to the most common causes of hospital admissions.**

| Causes for hospital admissions. | No. | %    |
|---------------------------------|-----|------|
| Infections                      | 78  | 48,1 |
| Pericarditis and Pleurisy       | 45  | 27,8 |
| Lupus Nephritis                 | 33  | 20,4 |
| Hemolytic Anemia                | 21  | 13,0 |
| Peripheric Thrombosis           | 5   | 3,1  |

Source: Clinical charts.  $X^2=98,30$   $p=0,000$

Table 5 the results of the study according to the most common causes of hospital admissions where it was observed a predominance of infections in 78 patients for a 48,1%.

When comparing the patients' ratio according to more common causes for hospital admissions, very significant differences were found.

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**Table 3. Distribution of patients according to personal previous history.**

| Personal previous history           | No. | %    |
|-------------------------------------|-----|------|
| Arterial Hypertension               | 57  | 35,2 |
| Hypothyroidism                      | 39  | 24,1 |
| Hashimoto's Lymphocytic Thyroiditis | 26  | 16,0 |
| Bronchial Asthma                    | 13  | 8,0  |
| Hyperlipoproteinemia                | 8   | 4,9  |
| Diabetes Mellitus                   | 6   | 3,7  |

Source: Clinical charts.  $X^2=19,87$   $p=0,001$

Table 3, the results of the study appear according to personal previous history, where it was found a predominance of arterial hypertension with 57 patients that represented a 35,2 %.

When comparing the patients' ratio according to personal previous history very significant differences were found.

**Table 6. Distribution of patients according to systems most affected during the evolution of the disease.**

| Affected systems      | No. | %    |
|-----------------------|-----|------|
| Osteomyoarticular     | 122 | 75,3 |
| Skin and Mucosa       | 93  | 57,4 |
| Cardiovascular        | 59  | 36,4 |
| Genitourinary (Renal) | 37  | 22,8 |
| Hematologic           | 32  | 19,8 |
| Neurologic            | 17  | 10,5 |
| Respiratory           | 11  | 6,8  |
| Digestive             | 7   | 4,3  |

Source: Clinical charts.  $X^2=70,76$   $p=0,000$

Table 6 in the distribution of patients according to systems most affected during the evolution of the disease, the osteomyoarticular one had the highest representation of cases with 122 patients, demonstrating the 75,3%, followed by skin and mucosa affection with 93 patients for a 57,4% of the total of the sample. When comparing the ratio of patients with more affected systems very significant differences were found

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**Table 4. Distribution of patients according to toxic habits.**

| Toxic Habits | Patients |      |
|--------------|----------|------|
|              | No.      | %    |
| Coffee       | 78       | 48,1 |
| Alcohol      | 41       | 25,3 |
| Tobacco      | 15       | 9,6  |

Source: Clinical charts  $X^2=28,34$   $p=0,000$

Table 4 the distribution of patients according to toxic habits where it can be observed that the first place was occupied by coffee in take in 78 patients for a 48,1%.

When comparing the rate of patients according to toxic habits very significant differences were found

**Table 7. Prescribed therapy at the moment of diagnosis.**

| Prescribed therapy             | No. | %    |
|--------------------------------|-----|------|
| Prednisone                     | 133 | 82,1 |
| Azathioprine                   | 98  | 60,5 |
| Chloroquine/Hydroxychloroquine | 47  | 29,0 |
| Cyclophosphamide               | 17  | 10,5 |

Source: Clinical charts.  $X^2=221,56$   $p=0,000$

Table 7 represents the more used therapies on diagnosis. Prednisone (5mg) was the most used medication, administered to 133 patients, representing a 82,1% of the total sample, followed by Azathioprine, administered to 98 patients representing a 60.5%.

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