**FATIGUE IN SYSTEMIC LUPUS ERYTHEMATOSUS**

1. **What exactly is fatigue ?**

Fatigue can be described as a **subjective unpleasant sensation of exhaustion with physical and mental components**, which **interferes with individuals’ ability to function at their normal capacity**. It is a complex, multidimensional and poorly understood concept.

Fatigue is a universal symptom experienced by nearly everyone in the general population, but the experience of fatigue in systemic lupus erythematosus seems to differ from ‘everyday tiredness’, as being **more frequent, unpredictable and typically unresolved by rest**.

1. **How frequent is fatigue in systemic lupus erythematosus ?**

Lupus patients describe fatigue as **one of the most common and bothersome symptom** of the disease. It is reported by **67% to 90% of patients**, and is often **severe** in intensity (one third of patients).

1. **What are the consequences of fatigue in systemic lupus erythematosus ?**

Fatigue may impair several key aspects of the quality of life, with **repercussions on both physical and mental health**.

In systemic lupus erythematosus, fatigue has a negative impact on emotions, cognition, work, activities of daily living, leisure activities, social activities and family activities.

Notably, it can be a cause of stress due to being unable to accomplish certain tasks.

1. **What are the predictors of fatigue in systemic lupus erythematosus ?**

Fatigue is a highly **multifactorial** manifestation, caused by a **complex interplay between disease itself, psychosocial, behavioral and personal factors.**

Here are the most important factors that have been described as **fatigue determinants in systemic lupus erythematosus** *(a \* means that its association with fatigue remains controversial)*:

* Depression and anxiety
* Stress
* Sleep disorder
* Disease activity\*, especially if associated with neurological impairment orpainful manifestations
* Pain
* Organ damage, such as renal or cardiologic failure
* Reduced level of physical activity
* Smoking
* Obesity
* Anemia
* Adrenal failure
* Vitamin D insufficiency\*
* Sociodemographic features\* (low annual income, difficulties in accessing health care…)
* Glucocorticoid use (BUT you should NEVER stop it or decrease it without your doctor’s approval)

Here are some **other common non-lupus related causes** of fatigue :

* Pregnancy
* Metabolic disorder (hypothyroidism, adrenal insufficiency, panhypopituitarism…)
* Chronic infections
* Organ failure (renal, cardiologic, hepatic, pulmonary…)
* Drug-induced fatigue (you should NOT stop any drug without your doctor’s approval)

1. **How can I assess my fatigue level in systemic lupus erythematosus ?**

Because fatigue is a subjective symptom, the best way to assess fatigue is to let **YOU** evaluate it, with the use of validated **Patient Reported Outcomes** (PROs).

The most commonly used ones are **FACIT-F** - which you completed in the LEAF survey - or the **FSS** (Fatigue Severity Scale) for the intensity of your fatigue, and the **MFI** (Multidimensional Fatigue Inventory) - which you also completed in the LEAF survey - for the characteristics of your fatigue.

You can use these scores multiple times, for a follow up of your fatigue intensity and characteristics over time.

1. **How to manage fatigue in systemic lupus erythematosus ?**

At this time, there is **no validated recommendation** for the management of fatigue in systemic lupus erythematosus.

Since fatigue may be influenced by a variety of factors, the management of fatigue should rely upon a **personalized approach**, using **pharmacological treatments** and/or **non** **pharmacological interventions**.

Obvioulsy, **management of fatigue predictors** is important.

* **What are the pharmacological treatments that can improve fatigue ?**

If your lupus is active, **lupus treatments** may have beneficial effects on your fatigue.

**Vitamin D supplementation** may help reducing fatigue, if you have vitamin D insufficiency.

Other pharmacological treatments, such as analgesics or antidepressants, may be useful, according to the fatigue predictors you have.

* **What are the non-pharmacological interventions that can improve fatigue ?**

**Physical activity** is one of the most efficient intervention to improve fatigue – but it also leads to less pain interference, better physical function, cardiovascular risk reduction, bone strength amelioration, and even positive impact on the mood. Importantly, it is **safe and well-tolerated** for lupus patients.

Here are some other interventions that have proven their efficacity on reducing fatigue :

* **Psychosocial interventions**, such as cognitive behavioral therapy, psychoeducation, relaxation…
* **Pain management :** acupuncture, relaxation…

**Getting better sleep habits**, **quitting smoking**, or **anxiety/stress/depression management** can also diminish fatigue.