AVOIDING COMPLICATIONS IN SYSTEMIC LUPUS ERYTHEMATOSUS

Diet and Lifestyle Reduce Risk Factors

© Elaine Moore

Various (some preventable) symptoms and complications and their initial presentation in patients with lupus are associated with different degrees of mortality.

Improved Outcome

During the last decade, the outcome for patients with systemic lupus erythematosus (SLE) has improved considerably. However, complications of systemic lupus erythematosus can still occur, and the mortality rate for lupus patients admitted to the intensive care unit is quite high.

Complications contributing to mortality in intensive care patients include pulmonary edema, respiratory failure, coronary artery disease, intracranial hemorrhage and renal disease: other reasons for admission to the intensive care unit noted in one retrospective study include neutropenia (low granulocytic white blood cell count), pneumonia, sepsis/systemic inflammatory response and reactions to medications.

Influencing Factors

Factors influencing mortality include the degree of organ damage present at the time of diagnosis and the presence of coronary artery disease. Patients with renal involvement (lupus nephritis) and coronary artery disease generally have a poorer prognosis.

Although infection was once a significant cause of mortality in patients with systemic lupus erythematosus, improved diagnostic tests and treatments have significantly improved the outcome for infection in systemic lupus erythematosus. Recent studies show that active systemic lupus erythematosus is associated with higher mortality in newly diagnosed patients but not in patients with long-term disease.

Long-term patients (more than 5 years from diagnosis) with acute and chronic conditions of vasculitis have a higher mortality risk than patients who have been diagnosed with systemic lupus erythematosus for less than 5 years.

Chronic Organ Damage

Chronic damage in systemic lupus patients is defined as a non-reversible change in clinical symptoms that have developed since the onset of lupus. The assessment of damage has been facilitated by the development of the Systemic Lupus International Cooperating Clinics and American College of Rheumatology (SLICC/ACR) damage index. This index covers 39 items that are divided among 12 systems. The index, which is different than disease activity, has been shown to be valid and reliable. As an example of
the index, patients with renal or pulmonary damage developing within one year of disease onset have a high risk of death or dialysis within 10 years.

Results from a large study in Birmingham UK show that the musculoskeletal system, neuropsychiatric and cardiovascular systems are the most likely systems to become involved in patients with systemic lupus. Among the musculoskeletal disorders seen in lupus, osteoporotic fractures are considered one of the most preventable complications. In addition, studies show that among patients with lupus, lower bone density readings are associated with an increased carotid plaque index and the presence of coronary artery calcification. The least commonly affected systems include malignancy, diabetes, and premature gonadal failure.

**Cardiovascular Disease**

Among patients with SLE the most common form of cardiovascular disease is coronary artery disease. The relative risk for a myocardial infarction in women with lupus aged 35-44 years is reported to be 52.3 times higher than in women without lupus. The mean age for myocardial infarction in lupus patients is reported to be 49 years compared to 65-74 years in the non-lupus population. Risk factors for coronary artery disease in patients with lupus include:

* Older Age at the Time of Diagnosis
* Longer Disease Duration
* Longer Steroid Use, Especially Higher Cumulative Dose
* Elevated Cholesterol
* Hypertension
* Post-Menopausal Status
* Obesity
* Diabetes Mellitus

Patients with systemic lupus have also been found to have higher levels of total cholesterol and triglycerides as well as lipid hydroperoxides, which are consistent with oxidative stress. Patients with a sustained increase in cholesterol are also more likely to develop coronary artery disease. A sustained increase in cholesterol is associated with cumulative steroid dose, absence of anti-malarial therapy (Plaquinil), and onset of lupus at an older age.

**Diet and Supplements**

Diet, lifestyle and supplements have been widely studied in lupus, and the benefits of dietary and lifestyle changes are well documented. The value of antioxidant vitamins in reducing oxidative stress has also been confirmed in many studies. Reducing risk factors of mortality with lifestyle changes is a means of empowerment for patients with systemic lupus and other autoimmune disorders.

Resources:


The copyright of the article Systemic Lupus Erythematosus in Autoimmune Disease is owned by Elaine Moore. Permission to republish Systemic Lupus Erythematosus in print or online must be granted by the author in writing.