Clinical Trial ID:

NCT00000421

Title:

Serologically Active, Clinically Stable Systemic Lupus Erythematosus

Summary:

The first part of this study will use the database of a large, ongoing NIH-sponsored lupus study, Safety of Estrogen in Lupus Erythematosus National Assessment. We will examine the levels of a blood protein known as C3a in a series of patient blood samples to see if C3a levels predict lupus flares or are better than other blood tests, and therefore should be used more widely in managing lupus. In the second part of the study we will add or increase prednisone treatment on the basis of abnormalities in blood tests for C3a and dsDNA antibodies. Early treatment based on increases in C3a and dsDNA antibodies, before the patient develops physical signs of disease, may reduce lupus flares and, ultimately, the patient's total steroid exposure.

We will follow study participants for 1 year on a monthly basis and do full physical

examinations and laboratory evaluations. If C3a and dsDNA antibody levels are increased significantly above baseline levels while a patient is clinically stable, we will give the patient either prednisone or an inactive pill (placebo) for 1 month. We will follow these patients monthly to compare how often lupus flares occur in the two groups. This approach could provide a novel method of preventing lupus flares, using C3a as a sensitive predictor of flare.

Detailed Description:

In lupus, serial evaluation of dsDNA antibody titers and complement (C3 and C4) in blood samples have been useful in assessing disease activity in patients. High levels of C3a, a split product of C3, are particularly sensitive and reflective of lupus flares. Our study looks at whether elevations in C3a can predict lupus flares and how C3a compares with other conventional blood indicators such as dsDNA antibody, C3, C4, and CH50. The utility of serial anti-dsDNA antibodies and complement measurements in clinical decision-making for people with systemic lupus erythematosus (SLE) remains controversial. This study has

two specific parts designed to address these issues.

In the first, we will take advantage of a unique opportunity to collaborate with a large,
multicenter NIH-sponsored protocol, the Safety of Estrogens in Systemic Lupus National
Assessment (SELENA) trial. We will perform an observational study of approximately 1,000
women enrolled in the SELENA trial to assess the sensitivity, specificity, and predictive
value of anti-dsDNA antibodies, C3, C4, CH50, and C3a desArg. Using samples from patients
enrolled in the SELENA study, we will perform subgroup analyses in diverse ethnic groups,
patients treated with exogenous estrogen, and patients with chronically depressed CH50.

In the second-an interventional study-we will evaluate the effectiveness of short-term
corticosteroid treatment in averting flares when elevations of plasma C3a are accompanied
by rising anti-dsDNA antibody. We will determine whether corticosteroid treatment reduces
the frequency of clinical flare, serological abnormalities, or disease activity in inactive or stable patients. We will explore whether steroids disproportionately

exacerbate or initiate comorbid medical conditions (e.g., hypertension, diabetes) that may be more prevalent among minority patients. The studies should result in observations that lead to rational, cost-effective, and evidence-based guidelines that improve the treatment of patients with SLE and-by decreasing the morbidity of disease-result in significant improvement of their quality of life.

Eligibility Criteria:

Inclusion Criteria:

- **Meets ACR criteria for SLE**
- **Inactive or stable in lupus activity**
- **History of positive dsDNA**
- **Current prednisone dose no more than 15 mg daily**

Exclusion Criteria:

- **Active infections**
- **Poorly controlled diabetes mellitus**

- **Pregnancy**

- **Uncontrolled hypertension**

Gender:

Female

Minimum Age:

13 Years

Maximum Age:

65 Years

Phase:

Phase 2

Conditions:

- Systemic Lupus Erythematosus

Interventions:

- Prednisone

- Placebo

Locations:

- Office of Betty Diamond, M.D., Bronx, New York

- North Shore-Long Island Jewish Health System, New Hyde Park, New York

- Lenox Hill Hospital, New York, New York