Cyclophosphamide for Systemic Sclerosis-related Interstitial Lung Disease: A Comparison of Scleroderma Lung Study I and II

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Hi, my name is Dr. Elizabeth R. Volkmann and I'm an adult rheumatologist at the University of California Los Angeles (UCLA), and I'm also the founder and co-director of the UCLA CTD ILD Program.

Interstitial lung disease (ILD) is actually the leading cause of death in patients with systemic sclerosis (SSc), and the purpose of this study was to look at the effects of one treatment on ILD and SSc and cyclophosphamide (CYC).

CYC has been used a lot to treat these patients, and there were two studies that were very informative about the effects of CYC in SSc-ILD. These were the Scleroderma Lung Study (SLS) I and II. Both of these studies included relatively early patients with SSc who had some evidence of ground-glass opacity or inflammation on their high-resolution computed tomography.

In this study, patients received 12 months of oral CYC. What we found in the study was that patients in both SLS I and SLS II had a significant improvement in their lung function over the first 12 months. Once they stopped the CYC therapy, in the second year of the study their lung function declined.

So the results of both of these trials suggest that the treatment for SSc-ILD needs to be continued beyond a two-year period, but CYC is effective in treating patients early on.