CVD May Be Linked to Depression in Lupus

BY MITCHEL L. ZOLER

PHILADELPHIA — Patients with lupus have a high prevalence of depression, which may be linked to the cardiovascular disease that's also highly prevalent in lupus patients.

Cardiovascular disease and cardiovascular risk "may precipitate development of depression in patients with lupus," Laura Julian, Ph.D., said at the annual meeting of the American College of Rheumatology.

It's also possible that depression in patients with lupus exacerbates cardiovascular disease by making patients poorly compliant with treatment. "The relationship between cardiovascular disease and depression [in lupus patients] may be bidirectional," she said.

Because of this apparent interrelationship, physicians who care for SLE patients should regularly screen them for depression and treat it when it's diagnosed. Physicians should also be diligent about screening for and treating cardiovascular disease risks in lupus patients, said Dr. Julian, a neuropsychologist at the University of California, San Francisco.

"Our working hypothesis is that accumulation of vascular disease in specific white-matter regions of the brain might precipitate development of depression, and in lupus patients there is a very high risk of cardiovascular outcomes, so we think this is reasonable," Dr. Julian said in an interview.

This etiology has been called vascular depression.

Evidence supporting the occurrence of vascular depression in SLE patients came from following patients who were enrolled in the Lupus Outcomes Study, which enrolled patients with SLE at the University of California, San Francisco.

Dr. Julian and her associates collected data from 725 lupus patients who were followed for more than 5 years. More than 90% of the patients were women, and their average age at entry to the study was 51 years.

At entry and regularly during follow-up, the researchers assessed the patients for depression by having them complete the CES-D (Center for Epidemiology Studies–Depression) scale, a commonly used, self-reported, 20-question survey. People who scored 23 or higher on the CES-D were considered to have probable depression. In the series, 23% met this set of criteria at baseline.

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Depression in lupus may result from accumulation of vascular disease in specific white-matter regions, according to Laura Julian, Ph.D.

During follow-up, about 12% of the SLE patients developed depression each year, but another 10% who had been previously identified with depression remitted. Dr. Julian said this pattern is typical for depression.

Dr. Julian and her associates analyzed a variety of demographic and clinical variables to see which factors were linked with new-onset depression during the 5 years of follow-up.

A multivariate analysis identified three measures that had a significant association: a socioeconomic status below the poverty level, which linked with a greater than threefold risk for incident depression; a history of myocardial infarction or stroke, linked with a twofold greater rate of new depression; and greater SLE disease activity, linked with a 12% higher rate of new depression.

Analyzing the data in a different way, the researchers found that through the 5 years of follow-up, 25% of the SLE patients without a history of cardiovascular disease or poverty had an episode of new depression. Among those with either cardiovascular disease or poverty, the rate for a new depression episode was about 40%. And in patients with a history of both cardiovascular disease and poverty, 80% had an episode of incident depression during the study period.

The CES-D could be used to diagnose depression in a routine-practice setting, and it would be reasonable for physicians to screen SLE patients for depression every few months, Dr. Julian said.

It is reasonable to use conventional behavioral and medical treatments on depressed SLE patients, until data suggest otherwise, Dr. Julian added.

She said that she had no financial disclosures. ■

Watch a video interview with Dr. Julian at www.youtube.com/watch?v=cdbogXZfUBk.

Rituximab Seems Promising In Refractory Myopathy

BY AMY ROTHMAN SCHONFELD

PHILADELPHIA — Six of eight patients with anti–signal recognition peptide myopathy that was refractory to standard immunosuppressive therapy showed clinical improvement with rituximab, according to findings from recent research.

Presenting the data at the annual meeting of the American College of Rheumatology, Dr. Ritu Valiyil noted that patients who responded to rituximab were able to lower their doses of corticosteroids.

Myopathy associated with anti–signal recognition peptide (anti-SRP) autoantibody is a severe, necrotizing, immune-mediated disease characterized by rapidly progressive proximal muscle weakness, myalgia, dysphagia, and markedly elevated serum creatine kinase (CK) levels. Patients generally respond poorly to conventional immunosuppressive therapies such as azathioprine, methotrexate, or intravenous immunoglobulin, says Dr. Valiyil, a rheumatology fellow at Johns Hopkins University, Baltimore.

A chart review identified eight patients who had failed standard immunosuppressive therapies who were then given two doses of rituximab, an anti-CD20 monoclonal antibody. The eight patients' mean age was 37 years; six were women, and four were black.

As soon as 2 months after receiving two doses of rituximab, six of the eight patients demonstrated improved muscle strength in their hands. Prior to treatment with rituximab, the mean creatine kinase was 1,835 IU/L, which declined to a mean of 777.5 IU/L after treatment. Three patients sustained the response for 12-18 months after initial dosing.

All patients on rituximab continued on adjunctive steroid therapy but were able to reduce their corticosteroid dose. The mean highest prednisone dose prior to receiving rituximab was 75 mg/day; the mean lowest dose after rituximab was 21 mg/day.

Autoantibodies were detected and quantitated in the serum samples collected before and after rituximab treatment in five patients. Four of the five patients showed a decrease in serum anti-SRP antibodies. The substantial decrease in anti-SRP antibody levels after rituximab suggest that B cells and anti-SRP antibodies may play a role in the pathogenesis of this myopathy, commented Dr. Valiyil.

"It should be noted that [many] of our patients were African American and we cannot rule out the possibility that there may be more of a response in this particular group of patients," explained Dr. Lisa Christopher-Stine, a rheumatologist at Hopkins who is the principal investigator of the study.

Dr. Valiyil and Dr. Christopher-Stine reported having no financial conflicts of interest to disclose. ■

Eye Problems Common After Stem Cell Transplantation

BY MARK S. LESNEY

Ocular complications are common in patients undergoing allogeneic hematopoietic stem cell transplantation for hematologic disorders and malignancies, according to the results of a retrospective observational study.

Dr. Khalid F. Tabbara and colleagues at the King Faisal Specialist Hospital and Research Center, Riyadh, Saudi Arabia, examined results for 620 patients with hematologic or lymphoid malignancies or nonneoplastic hematologic disorders who underwent allogeneic hematopoietic stem cell transplantation (HSCT) in 1997-2007. The stem cell source was allogeneic donor bone marrow in 459, peripheral blood in 151 patients, and cord blood in 10 patients. All patients had a baseline ophthalmologic examination and subsequently a complete ophthalmologic examination after ocular complications developed; 1-year follow-up was available for 447 patients.

Of the 620 patients, 80 (44 women; mean age, 29 years) developed major ocular complications. In all, 34 of the 80 patients developed chronic graft vs. host disease (GVHD), a major complication after HSCT.

GVHD typically involves ocular complications, most commonly keratoconjunctivitis sicca (KCS, or dry-eye syndrome), which in this study occurred in 29 of 34 patients. Dry-eye syndrome without evidence of systemic GVHD developed in 30 patients, corneal ulcers in 15 patients, steroid-induced cataract in 8 patients, and glaucoma in 6 patients.

Other complications included cytomegalovirus infection (four patients), allergic conjunctivitis (four patients), uveitis (four patients), and fungal endophthalmitis (one patient), according to the investigators.

KCS in patients with GVHD tended to be more serious, with 8 patients rated grade 1 (mild), 12 rated grade 2, and 9 rated grade 3. In contrast, KCS in those patients without GVHD was rated grade 1 in 22 patients, grade 2 in 5, and grade 3 in 3 (Ophthalmology 2009;116:1624-9).

"Major ocular complications may have been overlooked if the patients were so ill that they did not request ophthalmologic consultation," the researchers stated. They reported no financial disclosures. The study was supported in part by a fund from the Eye Center and the Eye Foundation for Research in Ophthalmology in Riyadh. ■