New Guidelines Focus on Monitoring in SLE

BY DIANA MAHONEY

COPENHAGEN — New recommendations from the European League Against Rheumatism offer a road map for careful assessment of the multiple organ systems affected by systemic lupus erythematosus.

The EULAR guidelines also distinguish potentially reversible disease activity, disease-related organ damage, and health problems that are unrelated to the disease, Dr. Marta Mosca reported at the annual European Congress of Rheumatology.

The evidence-based recommendations "are designed specifically for use in clinical practice by rheumatologists and other clinicians caring for lupus patients," said Dr. Mosca a rheumatologist at the University of Pisa, Italy, and lead author of the recommendation paper. They include:

► **Patient assessment.** In addition to routine clinical practice, "the assessment of SLE patients must include an evaluation of disease activity with a validated index at each visit and an annual evaluation of organ damage," Dr. Mosca said. Additionally, general quality of life—as ascertained by patient history and by a 0-10 visual analog scale, comorbidities, and drug toxicity—should be assessed at each visit.

► **Cardiovascular risk factors.** At the baseline visit, and at least once annually during follow-up, "ask patients about smoking, vascular events, physical activity, their use of oral contraceptives and/or hormonal therapies, and family history," Dr. Mosca said. Lipid profile and serum glucose measurement should be done at baseline and annually thereafter, as should examination of blood pressure and body mass index or waist circumference. "Dependent on the findings, a patient may require more regular follow-up for specific conditions," she said.

► **Other comorbidities.** Individuals with lupus are at increased risk for certain comorbidities, particularly osteoporosis, Dr. Mosca said. "Corticosteroid medications can trigger bone loss; disease-associated pain and fatigue can lead to inactivity, further increasing the osteoporosis risk; and bone loss may occur as a direct result of the disease."

The guidelines recommend assessing all SLE patients for adequate calcium and vitamin D intake, regular exercise, and smoking status. SLE patients should be screened and followed for osteoporosis according to the guidelines for postmenopausal women, for patients on steroids, or for patients on any other drug that may interfere with bone mineral density, she said.

Studies have also shown that SLE patients are at an increased risk for certain cancers, "yet lupus patients tend to undergo screening less often than do individuals in the general population," possibly because lupus-related concerns may take precedence, Dr. Mosca said. The guidelines recommend cancer screening according to the guidelines for the general population. "It's up to the clinicians who care for these patients to encourage appropriate screening," she said.

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► **Infection risk.** Lupus patients should be screened for HIV based on individual risk factors, and they should be screened for the hepatitis C and the hepatitis B viruses and for tuberculosis according to local guidelines before beginning immunosuppressive therapy, according to the recommendations. During immunosuppressive therapy, selected SLE patients should be tested for cytomegalovirus infection, because it increases the degree of immunosuppression of cell-mediated immunity, Dr. Mosca said. Because of the increased risk of infection in SLE, patients should receive only inactivated pneumococcal and influenzae vaccines, according to CDC guidelines for immunosuppressed patients, "preferably during periods of inactive disease," she said.

► **Frequency of assessment.** The recommendations suggest patient assessments every 6-12 months for individuals with inactive disease, no organ damage, and no comorbidities. The treating clinician should emphasize prevention at the time of these assessments, she said.

► **Laboratory assessment.** According to the guidelines, baseline laboratory assessment should include testing for antinuclear antibodies (ANA), antiphospholipid (aPL) antibodies, Complement 3 (C3) and Complement 4 (C4), as well as the following autoantibodies: anti–double stranded DNA (anti-dsDNA), anti-Ro, anti-La, and antiribonuclear protein (RNP). Prior to pregnancy, previously negative patients should be re-evaluated for aPL, anti-Ro, and anti-La antibodies. Prior to surgery, transplant, or the initiation of estrogen containing treatments, or in the presence of a new neurologic or vascular event, previously negative patients should be tested for aPL, according to Dr. Mosca. At 6- to 12-month intervals in patients with inactive disease, "we recommend performing a complete blood cell count, erythrocyte sedimentation rate, C-reactive protein, serum albumin, serum creatinine, and urinalysis," she said. "Monitoring should be tailored to specific treatment drugs, when necessary."

► **Mucocutaneous involvement.** "Mucocutaneous lesions should be characterized, according to existing classification systems, as to whether they may be lupus-specific, lupus nonspecific, lupus mimickers, or drug related," Dr. Mosca reported. "All lesions should be assessed for activity and damage using validated indexes."

► **Kidney involvement.** Monitoring recommendations in this domain depend on kidney status. "Patients with persistently abnormal urinalysis or creatinine should have a urine protein/creatinine ratio or 24-hour proteinuria [test], urine microscopy, renal ultrasound, and be considered for biopsy referral," Dr. Mosca said. "Patients with established nephropathy should have urine protein/creatinine ratio or 24-hour proteinuria [test], immunological studies [C3, C4, anti-dsDNA], and urine microscopy at least every 3 months for the first 2-3 years; and patients with established chronic kidney disease should be followed according to the National Kidney Foundation guidelines for chronic kidney disease."

► **Neuropsychological manifestations.** Although the rate of neurocognitive impairment in SLE is high, "monitoring neurocognitive status is difficult because there are no standardized assessment tools for this population," Dr. Mosca said. All SLE patients should be monitored for neuropsychological symptoms using a focused history. Additionally, "cognitive impairment may be assessed by evaluating memory, attention, concentration, and word-finding difficulties; and if there is suspicion of cognitive impairment, the patient should be referred to a specialist for a more detailed assessment," she said.

► **Eye assessment.** Eye damage in patients with lupus varies from minor problems to severe retinopathy. A small percentage of lupus patients develop scleritis, retinal vasculitis, cotton wool spots at the back of the eyeball, or retinal bleeding and swelling of the optic disc. According to the guidelines, patients on steroids or antimalarial drugs should undergo a baseline eye examination according to standard recommendations. Annual follow-up eye exams are recommended in selected patients taking steroids and those at high risk for eye problems, Dr. Mosca said.

In addition to facilitating good clinical practice, the recommendations for monitoring SLE are expected to "improve the quality control of care for lupus patients and to standardize the collection and comparison of data in observational studies," Dr. Mosca concluded.

The recommendations, which are expected to be published in the Annals of Rheumatic Disease later this year, were developed by an expert panel using a three-staged consensus approach comprising a discussion of relevant categories, a comprehensive literature review and level of evidence assessment, and the integration of the evidence with expert opinion, Dr. Mosca said.

She reported having no financial conflicts of interest to disclose. ■

Severity, Duration of Rheumatoid Arthritis Predict CVD

COPENHAGEN — Rheumatoid arthritis patients with higher disease severity and longer disease duration had the highest risk for developing cardiovascular disease during 15 years of follow-up in a study with 107 patients.

In addition, rheumatoid arthritis (RA) patients with a higher level of inflammation, as indicated by elevated serum levels of C-reactive protein (CRP) early in the course of their RA, had the greatest risk for developing arterial stiffness during follow-up, Dr. Sella Aarrestad Provan said at the annual European Congress of Rheumatology.

Because the study enrolled RA patients who had been diagnosed within the prior 4 years, the findings "support the importance of early, active disease management in patients with RA," said Dr. Provan of the department of rheumatology at Diakonhjemmet Hospital in Oslo.

The study involved 238 patients enrolled in the EURIDISS (European Research on Incapacitating Disease and Social Support) cohort in 1992. Average age at enrollment was 52 years, and three-quarters were women.

At 15 years after enrollment, 107 of these patients underwent a follow-up examination. During follow-up, 44 of the 107 self-reported having cardiovascular disease. Also at 15 years, 102 patients had an applanation tonometry assessment that determined their central arterial stiffness. The analysis correlated these two end points with patients' clinical characteristics at entry.

Patients who developed cardiovascular disease had significantly longer disease duration at entry than did patients who remained free of cardiovascular disease, although none of the patients entered the study having had RA for more than 4 years. Other significant correlates of cardiovascular disease risk were a high CRP level at entry, a high score on the Stanford Health Assessment Questionnaire (HAQ), and a high score on the Ritchie index. In a logistic regression model that also controlled for age, sex, diabetes, and smoking status, the only entry measures that remained significant were disease duration and HAQ score, Dr. Provan said.

The only significant baseline predictor of high central arterial stiffness (augmentation index) at 15 years was a high CRP level in an analysis that controlled for age, sex, mean arterial pressure, height, heart rate, diabetes, smoking status, and current use of antihypertensive medication.

Dr. Provan said that she and her associates had no relationships to disclose.

—Mitchel L. Zoler