Continued from previous page

mean birth weight or the proportion of low-birth-weight or very-low-birth-weight newborns. There also was no difference in composite neonatal morbidity/mortality between the groups.

These findings are largely concordant with those of two other recent studies. In one study published in 2006, more than 800 women were randomly assigned to receive either antepartum periodontal treatment (before 21 weeks' gestation) or postpartum treatment (control). Periodontal treatment improved measures of periodontitis but did not significantly alter the risk of preterm delivery at less than 37 weeks' gestation (N. Engl. J. Med. 2006;355: 1885-94).

The other study – coined the MOTOR study (Maternal Oral Therapy to Reduce Obstetric Risk) – randomized more than 1,800 patients at three sites to periodontal treatment early in the second trimester or delayed treatment after delivery. Again, investigators demonstrated improvements in oral health after treatment, but found no significant reduction in preterm birth at less than 37 weeks of gestation (Obstet. Gynecol. 2009;114:551-9).

Current Thinking

What should we do in the wake of these negative findings?

First, we must realize that periodontal treatment in these trials improved the oral health of pregnant women, and that the benefits of good oral health cannot be disputed. Secondly, we must still appreciate – and share with our patients – that periodontal disease is very common and does appear to be associated with preterm birth (and possibly other adverse pregnancy outcomes), as well as with other negative health outcomes such as cardiovascular disease and diabetes.

We should be careful, however, and be sure to tell patients that treatment of periodontal disease alone does not appear to reduce the risk of preterm birth.

We need to study these associations further and better understand the mechanisms of periodontal disease–associated preterm birth. There also are unanswered questions about treatment. For example, is it possible that treatment prior to pregnancy may reduce the risk of preterm birth? Is it possible that using adjuvant antibiotic mouthwash may improve pregnancy outcomes? Questions such as these should be answered with additional clinical trials.

We also must better understand and delineate reported disparities in oral health. Periodontal disease disproportionately affects racial and ethnic minorities and those of low socioeconomic status. While differences in access to care and other behaviors and practices likely play a role in these disparities, experts believe that there also may be population differences in oral microbiology or inflammatory responses to bacterial colonization.

As we wait for more information, we can tell our patients about the importance of good oral health, and we can reassure them that periodontal disease treatment in pregnancy appears to be safe. We are not ready, however, to recommend routine screening and treatment of periodontal disease in pregnancy to improve pregnancy outcomes.

Dr. Macones said he has no disclosures relevant to this article. E-mail him at obnews@elsevier.com. ■

Select Criteria Denote High-Risk SLE Pregnancies

BY M. ALEXANDER OTTO

FROM THE INTERNATIONAL CONGRESS ON SYSTEMIC LUPUS ERYTHEMATOSUS

VANCOUVER, B.C. – Monthly monitoring by rheumatologists of every pregnancy in every woman with systemic lupus erythematosus may be unnecessary, according to Dr. Michelle Petri.

A relatively small list of criteria can distinguish high-risk pregnancies in women with systemic lupus erythematosus (SLE) – ones that carry a higher likelihood of miscarriage, extreme prematurity, and SLE flare – from others, and signal the need for intensive monitoring by obstetricians and rheumatologists, Dr. Petri said at the meeting.

At present, however, there is little effort to make such distinctions, so most SLE pregnancies are subjected to monthly visits to rheumatologists and obstetricians, and, starting at week 26, weekly monitoring by obstetricians.

That's not always necessary; women are subjected to needless anxiety and hospital resources are wasted, Dr. Petri said.

Based on the Hopkins Lupus Cohort, a database that has been tracking several thousand patients with SLE over the past 25 years, Dr. Petri and her colleague, Duke University rheumatologist Dr. Megan Clowse, have identified those factors that truly put women and fetuses at risk during SLE pregnancies.

Pregnancy and the postpartum period are hard on the kidneys of women with SLE, though organ involvement elsewhere in the body tends to lessen, said Dr. Petri, professor of rheumatology at Johns Hopkins University, Baltimore.

"Proteinuria from active lupus significantly increases, and this continues even after delivery," she added.

Therefore, pregnant women with lupus nephritis truly do need close monitoring. Dr. Petri recommended monthly urine protein-creatinine ratios to detect a worsening of the condition and the need for treatment.

She noted that the ranges on urine dipsticks are too broad; the dipstick is not adequate as a monitoring tool for nephritis.

In terms of fetal health, the risk of miscarriage doubles if, at the first pregnancy visit, a woman is proteinuric, thrombocytopenic, or hypertensive, or has a history of antiphospholipid syndrome.

The risk triples if two or more of these conditions are present, Dr. Petri said. The presence of antithyroid antibodies also increases the risk of miscarriage.

In addition, active SLE, especially if accompanied by anti–double-stranded DNA antibody or low complement levels, predicts extreme prematurity. Autoimmune thyroid disease also appears to be associated with preterm birth.

Screening for the various factors, "we can predict at the first pregnancy visit if there's going to be a poor outcome," Dr. Petri said.

If the risk factors are present, monthly monitoring by a high-risk obstetrician, followed by weekly monitoring at week 26, are appropriate to gauge if, and when, a rescue delivery is needed.

Otherwise, and absent renal involvement in the pregnant patient, SLE pregnancies may not need to be classified as high risk, Dr. Petri said.

"Since we can stratify women at risk for miscarriage and extreme prematurity, and know the only organ we have to worry about is the kidney, we can come closer to using our resources appropriately," Dr. Petri said.

To reassure women, rheumatologists should "get the word out to patients that high-risk interventions are not necessary for every [SLE pregnancy]," she said.

Dr. Petri said she had no disclosures to report. ■

Ketamine Reduces Post C-Section Pain at 6 Weeks

BY MIRIAM E. TUCKER

FROM THE ANNUAL MEETING OF THE SOCIETY FOR OBSTETRIC ANESTHESIA AND PERINATOLOGY

SAN ANTONIO – A single postpartum low dose of ketamine significantly and persistently reduced pain for up to 6 weeks after cesarean delivery compared with placebo, but there were no significant differences in chronic pain or depression between the two groups at 1 year, in a randomized, double-blind study of 82 women.

VITALS

Major Finding: Patients in the ketamine group reported significantly less pain at 6 weeks post partum, with scores of 1.3 vs. 2.3, but there were no significant differences at 6 weeks in depression or at 1 year in pain or depression.

Data Source: One-year follow-up of 82 parturients from an initial randomized, controlled trial of 188.

Disclosures: None was reported.

Low doses of the N-methyl-D-aspartate (NMDA) antagonist ketamine have been shown to decrease postoperative opioid requirements, and the drug has also been shown to have an antidepressive effect (Arch. Gen. Psychiatry 2006;63:856-64). Those data led to the hypothesis that women who receive a single intravenous dose of ketamine might be less likely to develop postpartum depression or chronic pelvic pain, said Dr. Laurie Chalifoux of Northwestern University, Chicago.

A total of 188 women were randomized to receive either 10 mg IV ketamine or saline by a blinded anesthesiologist 5 minutes after cesarean delivery.

All received scheduled IV ketorolac 30 mg every 6 hours for 24 hours, along with 1 or 2 tablets of acetaminophen 325 mg/hydrocodone 10 mg every 4 hours as needed for breakthrough pain.

Among those 188 women, the group who received ketamine reported significantly lower numeric pain rating scores (on a scale of 1-10) than did those receiving saline.

However, there were no differences at any other time point, Dr. Chalifoux reported at the meeting.

The 82 patients who were available for an interview 1 year later were asked to report pain scores (1-10) and whether they had a self-diagnosis of depression at both 6 weeks and 1 year post partum. Patients in the ketamine group reported significantly less pain at 6 weeks post partum, with scores of 1.3 vs. 2.3.

Depression did not differ at 6 weeks, with just one woman (2%) from each group reporting that she was depressed at that point.

At 1 year, pain scores were nearly 0 in both groups and did not differ significantly (0.1 with ketamine vs. 0.0 with saline).

Depression also did not differ significantly, although there were two women (5%) who reported being depressed at 1 year in the saline group compared with none in the ketamine group.

It's possible that a higher dose than 10 mg might have had a greater impact, given that the previous studies showing analgesic and antidepressive effects used doses ranging from 0.15 to 1.0 mg/kg. However, the potential side effects of ketamine – including dysphoria, memory loss, hallucinations, seizures, nystagmus, hypertension, tachycardia, and nausea/vomiting – suggest that dosages should be kept in the lower ranges, Dr. Chalifoux noted.

Also, it's possible that ketamine might not have a large impact among healthy parturients, but it might among those who are at increased risk for depression or chronic pain, she said. ■