Women with periodontal disease had higher rates of low-birth-weight babies, preterm births in a small study.

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LOS ANGELES — A small study adds to the growing body of evidence implicating periodontal disease in poor pregnancy outcomes.

Twelve percent of women with periodontal disease had low-birth-weight babies in a 277-patient observational study. In comparison, only 2% of women with healthy gums had small babies, a statistically significant difference.

The data were presented in poster form at the annual meeting of the Society for Gynecologic Investigation. The women with periodontal disease also had a higher incidence of preterm births (7% vs. 3%) but Alexis L. Shub, M.D., an investigator in the study, said this difference was not statistically significant.

About 15% of women in the study had periodontal disease.

An analysis completed just before the meeting also found higher rates of tumor necrosis factor-alpha in the cord blood of women with periodontal disease, Dr. Shub, an obstetrician at the University of Western Australia in Perth, said in an interview.

These data were not included in the poster presentation, she noted, adding that the findings suggest an ongoing inflammatory process in these women and their fetuses.

John P. Newnham, M.D., who is the study’s lead author and director of the Women and Infants Research Foundation at King Edward Memorial Hospital in Perth, said in an interview that he is also working on a large, randomized controlled trial to study this issue. The investigators have begun to divide the 1,000 pregnant women with periodontal disease into two cohorts: one given periodontal care during pregnancy and the other surgery. The trial’s primary outcome will be preterm birth, fetal growth, and preeclampsia.

He said the investigators are concerned that heightened awareness of possible harm from periodontal disease could skew outcomes. They suspect screening patients for periodontal disease in the observational study led to better dental care. The preterm birth rates were expected to be about 11%, according to Dr. Newnham, who also plans to monitor pregnancy outcomes and prenatal care in a region-wide medical database.

“The exciting thing is that it is possible that a simple community-based public health intervention could have a profound impact on the need for expensive high-tech hospital resources,” he said.

Gaps Found in Parturient Resuscitation Knowledge

PALM DESERT, CALIF. — Obstetricians, emergency physicians, and anesthesiologists may suffer significant knowledge gaps when it comes to resuscitation of parturients, suggest survey results presented in poster form at the annual meeting of the Society for Obstetric Anesthesiology and Perinatology.

Faculty and residents in all three groups of specialists at Stanford (Calif.) University responded to an 11-question anonymous survey covering four critical knowledge areas concerning parturient resuscitation after catastrophic events leading to cardiorespiratory arrest.

► Awareness of the need for left uterine displacement.
► Recall of specific standard advanced cardiac life support (ACLS) algorithms.
► Knowledge of pertinent maternal physiology.
► Awareness of the recommendation to perform cesarean section in parturients at more than 20 weeks' gestation after 5 minutes of unsuccessful resuscitation for cardiac arrest.

Among 74 respondents, anesthesiologists answered the most questions correctly (average 76%). They were also better informed than other specialists about relevant maternal physiology.

Emergency physicians scored highest on questions regarding ACLS algorithms, averaging 93% correct responses.

All three groups earned similar scores on questions relating to left uterine displacement during resuscitation and the 5-minute cesarean rule. However, the rate of correct responses to those questions was low, at 60%–75%, said Leslie C. Andes, M.D., of the Stanford department of anesthesia, and her associates.

They recommended that residents in all three specialties be required to complete ACLS certification, with an emphasis on the special resuscitation needs of parturients. The issue may be of critical importance. Investigators pointed to findings in “Why Mothers Die 2000-2002,” a confidential analysis conducted in the United Kingdom that concluded some degree of substandard care was involved in more than 50% of maternal deaths and that most were preventable.

A lack of properly performed, timely resuscitation was implicated in some of those deaths.

“Catastrophic events leading to cardiorespiratory arrest may necessitate the resuscitation of pregnant women not only in labor and delivery suites, but also in other hospital locations,” Dr. Andes and her associates noted in the poster.