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March 06, 2014 | By Scott LaFee

Kawasaki Disease and Pregnant Women

UC San Diego researchers say risks are manageable, provided doctors recognize them

In the first study of its type, researchers at the University of California, San Diego School of Medicine have looked at the health threat to pregnant women with a history of Kawasaki disease (KD), concluding that the risks are low with informed management and care.

The findings are published in the March 6, 2014 online edition of the *British Journal of Obstetrics and Gynaecology*.

KD is a childhood condition affecting the coronary arteries. It is the most common cause of acquired heart disease in children. First recognized in Japan following World War II, KD diagnoses are rising among children in Asia, the United States and Western Europe. Predictive models estimate that by 2020 one in every 1,600 American adults will be affected by KD.

“A growing number of women with a history of KD are reaching child-bearing age, but there is little information available to guide their obstetrical care,” said study author Jane C. Burns, MD, professor and director of the Kawasaki Disease Research Center at UC San Diego and Rady Children’s Hospital-San Diego. “By and large, KD is virtually unknown among working obstetricians.”

KD is currently diagnosed by a constellation of clinical signs, with supporting lab tests that indicate high levels of inflammation. These signs include abrupt onset of high fever, accompanied by four of five criteria, among them: widespread rash, cracked and fissured lips, “strawberry tongue,” bloodshot eyes, lymph node enlargement and red, swollen hands and feet.

Without treatment, 25 percent of children with KD develop coronary artery aneurysms – balloon-like bulges of heart vessels – that may eventually result in heart attacks, congestive heart failure or sudden death. The condition can be treated with a high-dose of intravenous immunoglobulin and aspirin, reducing the risk of aneurysms to 5 percent. The long-term risk for adults with a history of KD in childhood is not known.

Senior study author John Gordon, MD, and colleagues conducted the first KD study of non-Japanese patients, and the first to explore the health risks to women with a history of KD and their offspring. They found that the health risks for mothers with no KD-related coronary artery damage were similar to the general population. For women with aneurysms, the risks were low with appropriate management and care.

“The main message is positive,” said Burns. “Women who have had KD can successfully deliver to term without complications. C-sections are not necessarily indicated if they have aneurysms, they can labor normally, if their overall cardiovascular status is OK.”

There is a genetic component to KD. The study found that two of the 21 children born to the 10 women with a history of KD also developed the disease. “There is clearly an increased risk in offspring,” said Burns, “but the (study) numbers are small so we cannot really calculate a risk until there is a larger population of KD adults who have had children.”

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Funding for this research came, in part, from grants from the National Heart, Lung, Blood Institute of the National Institutes of Health (grant HL U54 HL108460), the American Heart Association and the Gordon and Marilyn Macklin Foundation.

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