Medical experts recommend steps to reduce risk of inadvertent harm to potentially normal pregnancies

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A panel of 15 medical experts from the fields of radiology, obstetrics-gynecology and emergency medicine, convened by the Society of Radiologists in Ultrasound (SRU), has recommended new criteria for use of ultrasonography in determining when a first trimester pregnancy is nonviable (has no chance of progressing and resulting in a live-born baby). These new diagnostic thresholds, published Oct. 10 in the *New England Journal of Medicine*, would help to avoid the possibility of physicians causing inadvertent harm to a potentially normal pregnancy.

"When a doctor tells a woman that her pregnancy has no chance of proceeding, he or she should be absolutely certain of being correct. Our recommendations are based on the latest medical knowledge with input from a variety of medical specialties. We urge providers to familiarize themselves with these recommendations and factor them into their clinical decision-making," said Peter M. Doubilet, MD, PhD, of Brigham and Women's Hospital and Harvard Medical School in Boston, the report's lead author.

Among the key points made by the expert panel:

- Until recently, a pregnancy was diagnosed as nonviable if ultrasound showed an embryo measuring at least five millimeters without a heartbeat. The new standards raise that size to seven millimeters

- The standard for nonviability based on the size of a gestational sac without an embryo should be raised from 16 to 25 millimeters
- The commonly used "discriminatory level" of the pregnancy blood test is not reliable for excluding a viable pregnancy

The panel also cautioned physicians against taking any action that could damage an intrauterine pregnancy based on a single blood test, if the ultrasound findings are inconclusive and the woman is in stable condition.

Kurt T. Barnhart, MD, MSCE, an obstetrician-gynecologist at the Perelman School of Medicine at the University of Pennsylvania and a member of the SRU Multispecialty Panel, added, "With improvement in ultrasound technology, we are able to detect and visualize pregnancies at a very early age. These guidelines represent a consensus that will balance the use of ultrasound and the time needed to ensure that an early pregnancy is not falsely diagnosed as nonviable. There should be no rush to diagnose a miscarriage; more time and more information will improve accuracy and hopefully eliminate misdiagnosis."

Michael Blaivas, MD, an emergency medicine physician affiliated with the University of South Carolina and one of the panelists, emphasized that "These are critical guidelines and will help all physicians involved in the care of the emergency patient. They represent an up-to-date and accurate scientific compass for navigating the pathway between opposing forces felt by the emergency physician and his/her consultants who are concerned about the potential morbidity and mortality of an untreated ectopic pregnancy in a patient who may be lost to follow-up, but yet must ensure the safety of an unrecognized early normal pregnancy."

Provided by American College of Radiology