Third-trimester screen detects late alloimmunization

December 30 2015

(HealthDay)—Third-trimester screening for alloimmunization in Rhesus

c (Rhc)-negative women improves detection and treatment of hemolytic disease of the fetus and newborn (HDFN), according to a study published online Dec. 11 in *BJOG: An International Journal of Obstetrics and Gynaecology*.

Yolentha M. Slootweg, from the Leiden University Medical Centre in the Netherlands, and colleagues sought to identify the risk factors for late alloimmunization by evaluating the effect of red blood cell antibody screening in the 27th week of pregnancy in Rhc-negative women in a two-year nationwide cohort. The authors evaluated the effect of this screening on detection of alloimmunization, undetected at first-trimester screening ("late" alloimmunization), and subsequent HDFN.

The researchers found that late alloimmunization occurred in 99 of 62,096 (0.159 percent) Rhc-negative women. Severe HDFN (fetal/neonatal transfusion) occurred in two Rhc-negative women, while moderate HDFN (phototherapy) occurred in 20 children. To detect one HDFN case the number needed to screen was 2,823. Significant risk factors for late alloimmunization were former blood transfusion, parity, and amniocentesis/chorionic villus sampling during current pregnancy.

"The occurrence of most factors before the current pregnancy suggests a secondary immune response explaining most late alloimmunizations," the authors write.

More information: Abstract
Full Text (subscription or payment may be required)

alloimmunization.html