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Question: My patient is concerned about the risk for Zika virus transmission from blood product transfusion. What should I tell her regarding this risk?

Answer: As of February 1, 2016, there have been no reported cases of Zika virus transmission via blood product transfusion in the United States, although there have been two reports of possible transfusion transmission in Brazil. Despite the lack of proven cases, it is believed that Zika virus may be transmitted via transfusion, particularly since there have been proven cases of transfusion transmission of other related Flaviviruses including Dengue and West Nile Virus.

Currently, there is no FDA-licensed screening tests to detect Zika virus in blood donors. However, the risk of transmission of Zika virus through transfusion can still be minimized by adopting certain changes to the blood collection process. On February 16, 2016, the FDA released recommendations to blood collection centers for immediate implementation to reduce the risk of Zika virus transmission. Blood collection centers are now providing updated donor educational material discussing risk factors and signs and symptoms of Zika virus infection, which will assist at-risk donors in self-deferral. Additionally, the donor history questionnaire now assesses recent residence or travel to locations with active Zika virus transmission; donors at risk for Zika virus infection will be deferred from blood product donation for 4 weeks.

Until an FDA-licensed screening test becomes available, the FDA has also recommended that blood collection centers in areas with active Zika virus transmission either obtain blood products from other areas of the United States that do not have active virus transmission, or they may use locally collected platelets or plasma that have been treated with an FDA-approved pathogen reduction technology. This includes solvent/detergent treated pooled plasma, which is commercially available, as well as the recently FDA-approved amotosalen + UV illumination for plasma and platelet products. In addition to preventing transmission of a variety of other viruses and bacteria, the amotosalen + UV method has been specifically proven to inactivate Zika virus. This product has been widely used in Europe for many years, and is expected to become more widely available in the United States in the near future.

References:

Recommendations for Donor Screening, Deferral and Product Management to reduce the risk of Transfusion-Transmission of Zika Virus Infection [Internet]. U.S. Department of Health and Human Services Food and Drug Administration Center for Biologics Evaluation and Research; [February 2016; cited 2016 Mar 8]. Available from: http://www.fda.gov/downloads/BiologicsBlood Vaccines/GuidanceComplianceRegulatoryInformation/Guidances/Blood/UCM486360.pdf

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