Defining the role of antibodies that mediate ADCC in protection from infection and disease

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Community Summary

Question

Is antibody-dependent cellular cytotoxicity (ADCC) activity protective in HIV mother-to-child transmission?

Why is this Important?

MTCT mimics a vaccine situation whereby HIV-specific antibodies are present at virus exposure. If we understand what types of antibodies are protective, we may be able to design a more effective vaccine or therapy.

Findings

ADCC is associated with reduced infant infection (p=0.12) Higher ADCC is associated with reduced infant mortality (p=0.03) and lower set point viral load (p=0.07)

How is this related to Cure?

Vaccines that elicit ADCC antibodies may provide a protective and/or therapeutic effect. These antibodies may clear infected cells, thereby reducing infection risk and/or improving disease course.