

## ABID CASE #18

1. What can be said about the nature of this antibody(ies) based on the reactivity of the plasma with panel cells and the titration result?

*This antibody appears to be directed against a high frequency antigen. The titration shows the "high-titer, low-avidity" phenomenon.*

2. The AHG phase reactivity of this plasma was destroyed by ficin treatment of the RBCs but resistant to AET? How does this narrow the possibilities? (See appendix 3, SOP #221.)

*High frequency antigens that are destroyed by ficin and resistant to AET include,  $E_n^a$  and Gerbich (GE2 and GE4).*

3. What does the plasma neutralization test show? Why must a dilution control be done? What is the identity of this antibody?

*Incubation of the patient's plasma with pooled normal plasma eliminated the reactivity. The dilution control shows that this effect was not simply due to dilution of the strength of the antibody. This is characteristic of antibodies directed against the Chido and Rogers polymorphisms which are carried on C'4, the fourth component of complement.*

4. Would donor RBCs reactive with this antibody cause hemolytic transfusion reactions? Has any other type of reaction been associated with this antibody specificity?

*Anti-Chido/Rogers antibodies do not destroy RBCs. However, some individuals with this antibody have been reported to have severe allergic reactions when receiving plasma-containing components.*