



AMERICAN NEPHROLOGY NURSES' ASSOCIATION

**ANNA'S 43<sup>RD</sup> NATIONAL SYMPOSIUM**

**APRIL 29-MAY 2, 2012**

**WALT DISNEY WORLD DOLPHIN, ORLANDO, FL**

**False Positive Hepatitis B following Vaccine Administration**

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Hepatitis B vaccination is mandatory for all hepatitis B surface antigen (HBsAG) negative patients on hemodialysis (HD). A case of HBsAG antigenemia was detected in a HD patient 2 days after administration of recombinant hepatitis B vaccine. The patient was placed on HD isolation while further confirmatory testing was conducted. The HD unit's infection control practices were reviewed and the patient and family members were interviewed for possible exposure and risk factors. The initial positive HBsAG test result caused concern and anxiety for the patient, family, and staff. Confirmatory testing including a repeat HBsAG and hepatitis viral DNA was negative and indicated the earlier HBsAG result was false positive. We present this case to emphasize that health care providers should be aware of this phenomenon and that HBsAg testing be deferred until 4 weeks after vaccination.

Consultation with the lab and Infectious disease did not shed any light on our concern. A review of published evidence dating from 1996 indicated transient HBsAg positivity (lasting less than 21 days) can be detected after vaccination. This information was not on vaccine package insert or in our lab procedure manual. Further investigation found additional evidence to support the need to ensure that patients who are in the process of receiving the vaccine series should not have an HBsAg drawn within 30 days of receiving a dose of the vaccine.

Transient false positive HBsAG following vaccination detected up to 21 days or longer may not be widely known among health care providers. We have subsequently changed our hepatitis surveillance/administration protocols as well as the lab protocols to include this information. We present this case to emphasize that health care providers should be aware of this phenomenon and that HBsAg testing be deferred until 4 weeks after vaccination.

*Abstract selected for presentation at ANNA's 43rd National Symposium, Orlando, FL, 2012*