

E Antigen and Anti-E in the Serum of Asymptomatic Carrier Mothers as Indicators of Positive and Negative Transmission of Hepatitis B Virus to Their Infants

<https://www.nejm.org/doi/full/10.1056/nejm197604012941402>

DOI: 10.1056/NEJM197604012941402

Cited In:

N Engl J Med 1976; 294:746-749

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Abstract

Testing of serum samples of 23 pregnant women who were asymptomatic carriers of hepatitis B surface antigen for e antigen and antibody to e with an immunodiffusion technic identified 10 mothers with e antigen and seven with e antibody. Their babies were tested for hepatitis B surface antigen in serum at intervals for more than 12 months. In all 10 babies born to e-antigen-positive mothers hepatitis B surface antigen developed and persisted through the observation period, and all 10 elder siblings of these newborn babies were found to be asymptomatic carriers. In remarkable contrast, all seven babies born to mothers positive for antibody to e escaped antigenemia, and none of their three elder siblings carried surface antigen.

On the basis of these results, e antigen may be used as an indicator of transmission, and antibody to e as that of absence of transmission of hepatitis B virus from carrier mothers to children.

Reference

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