“How common is HTLV infection in pregnant women who already have hepatitis B?”

Findings from: HTLV seroprevalence in pregnant women with HBV: an unlinked anonymous surveillance study

What was the study about?

Human T-cell lymphotropic virus type 1 (HTLV-1) is a sexually-transmitted virus that affects around 30,000-40,000 people in the UK. It can lead to serious long-term health problems, including cancer and damage to the spinal cord although many people do not have symptoms at first and may not know they are living with the virus. Effective ways to prevent transmission include condom use and avoidance of breastfeeding. The World Health Organisation has called for better ways to help prevent HTLV-1 infections and have recommended estimating how common it is in key groups, including pregnant women. To do this efficiently, we tested samples which had already been collected from pregnant women with hepatitis B, to see if they are also living with HTLV.

Why is this important?

It is important to know who is at a high risk of HTLV-1 infection. This can help inform strategies to test and reduce infections in those that are at a higher risk, to reduce harm from HTLV infection.

What did we do?

Hepatitis B is routinely screened for in pregnant women in the UK, and samples that test positive are stored. We tested over 3,500 left over samples, collected in England between March 2021 and March 2023, for evidence of an immune response to HTLV-1. We used this information to work out the prevalence of HTLV-1, which is how many people in a particular population are infected, and how this varied by ethnicity.

Key findings

• Out of the 3,583 samples tested, 8 were positive for HTLV-1 antibodies, meaning that 2.2 out of every 1,000 samples tested positive. This is around four times higher than what has been seen in the general population of pregnant women in the UK. Women of black ethnicity had a higher prevalence (5.3 out of every 1,000 samples tested positive). No samples tested positive for HTLV-2.

• We found that it was likely that babies acquired HTLV-1 from their mother, which could have been avoided through HTLV testing with education to avoid breastfeeding if a mother is positive for HTLV-1.

What do these findings mean?

These findings provide evidence on who is at a higher risk of HTLV-1 infection, so should be considered for testing. We recommend HTLV testing with education to avoid breastfeeding if positive for HTLV-1, as a strategy to help prevent babies from acquiring HTLV-1 from their mother.