VARICELLA ZOSTER - (CHICKEN POX) - AND PREGNANCY

Recommendation:

Ask all women, at their first prenatal visit, whether or not they have had chicken pox.

If the woman's preconception varicella status is uncertain or not known varicella serology should be done to determine immune status. Women with a positive history of varicella include those who have had varicella, those who have had a positive varicella serology, or those who have received varicella vaccine. Women who are found to be non-immune should be vaccinated in the postpartum period. (Note: There are special considerations for Rh negative women - see page 2 for postpartum immunization discussion.)

In a non-urgent situation it may take up to a week to receive results of testing for immune status (specimens are sent to Halifax). If there has been a significant exposure to chicken pox, and immune status is uncertain, a request can be made to expedite the process by contacting the microbiology lab and explaining the circumstances.

A non-immune pregnant woman should be advised to contact her Doctor immediately if she is exposed to chicken pox. Because the risk of complications may be greater in pregnant women than in other adults, administration of varicella zoster immunoglobulin (VZIG) is recommended for non-immune pregnant women with a significant exposure.

VZIG is to be given within 96 hours of exposure to chicken pox. There is no assurance that administering VZIG to a pregnant woman will prevent congenital malformations in the fetus, but it may modify varicella severity in the pregnant woman.

VZIG is also indicated for newborns of women who developed varicella within 5 days prior to delivery or within 2 days following delivery.

NOTE: Oral acyclovir is not recommended particularly for pregnant women with uncomplicated varicella, because the risks and benefits to the fetus and mother are unknown. Some experts, however, recommend oral acyclovir for pregnant women with varicella, especially during the second and third trimesters. Intravenous acyclovir is recommended for the pregnant patient with serious complications of varicella.

VARICELLA ZOSTER - CHICKEN POX - EXPOSURE AND PREGNANCY

Varicella zoster virus was found to increase the baseline risk of congenital abnormalities by 2.2% when infection occurred before 20 weeks' gestation. Congenital varicella embryopathy is characterized by limb hypoplasia, skin scarring, neurologic abnormalities (microcephaly, mental retardation, cortical atrophy, dysfunction of bowel or bladder sphincter) and eye defects (cataracts, microphthalmia chorioretinitis).

Approximately 80% - 95% of women with no history of chicken pox infection are in fact

immune.

PREGNANCY AND LACTATION

Varicella vaccine **should not** be administered to pregnant women, because the possible effects on fetal development are unknown. When post pubertal females are immunized, pregnancy should be avoided for at least 1 month (4 weeks) after immunization. A pregnant mother or other household member is not a contraindication for immunization of a child in the household.

Immunization with varicella vaccine during the postpartum period **while an infant is breastfeeding should be encouraged at any time after delivery**. If there are varicella lesions on the breast after receiving the vaccine, the lesions should be covered during breastfeeding but there is no reason to stop breastfeeding if the mother gets some lesions.

Immune Globulin. Whether Immune Globulin(IG) can interfere with varicella vaccine-induced immunity is unknown, although IG can interfere with immunity induction by measles vaccine. Pending additional data, varicella vaccine (as with measles vaccine) should be withheld for 5 months after receipt of any form of IG or other blood product.

Postpartum immunization for rubella or varicella

1. **All women who are rubella non-immune should be vaccinated in the postpartum period before hospital discharge.**
2. **All women who are varicella non-immune should be vaccinated in the postpartum period but the timing is dependent on the Rh status.**

Women who are Rh positive, or Rh negative but did not require Win Rho , should receive rubella or varicella vaccine **before** hospital discharge, if required. For women who are Rh negative and received WinRho, rubella vaccine should be given before hospital discharge if required, but the varicella immunization should be delayed (see below).

Rubella: There is a possibility that WinRho **may** interfere with achieving immunity from vaccines. However, the benefits of preventing fetal rubella infection far outweigh the possible risks of WinRho interfering with vaccine acquired immunity to rubella. **Women who received both WinRho AND rubella vaccine before hospital discharge should have their rubella immunity checked at their six week postpartum visit.**

Varicella: The fetal risks from maternal varicella are small. Therefore, women who require WinRho and are varicella non-immune should Not receive varicella immunization before hospital discharge for two reasons:

1) since varicella vaccine is given to confer maternal immunity, the risk of WinRho interfering with vaccine acquired immunity should be considered, and
2) current varicella serology may not detect vaccine acquired immunity so the effectiveness of early varicella immunization cannot be confirmed.

Women who are varicella non-immune and received WinRho before hospital discharge should receive their first dose of varicella vaccine at their 6 week postpartum visit and their second dose 4 or more weeks later. We estimate that this exception will apply to 1% - 2% of all postpartum women each year.

Source: Reproductive Care Program of Nova Scotia. (July 2003) Changes to Antenatal Laboratory Screening and related prenatal and postpartum issues