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VARICELLA - ZOSTER IMMUNE GLOBULIN FOR THE PREVENTION OF NEONATAL CHICKENPOX

Since its licensure in 1981, varicella - zoster immune globulin (VZIG) has been available for the prevention of chickenpox in susceptible persons exposed to varicella virus and at high risk for serious disease if they develop illness. Among candidates for VZIG administration are persons with the following underlying illnesses or conditions:

1. Leukemia or lymphoma,
2. Congenital or acquired immunodeficiency,
3. Immunosuppressive treatment,
4. Newborn of mother who had onset of chickenpox within 5 days before or within 48 hours after delivery,
5. Premature infant (\geq 28 weeks' gestation) whose mother lacks a prior history of chickenpox,
6. Premature infant ($<$ 28 weeks' gestation or \leq 1,000 g) regardless of maternal history.

Candidates for VZIG should also have had significant exposure to chickenpox; and other than pre-term newborns should be susceptible to chickenpox (i.e., not have a personal history of chickenpox, or in the case of a newborn $>$ 28 weeks gestation, not be born to a mother who has had chickenpox). Here we report a case of serious disease quite possibly prevented through the judicious use of VZIG in an exposed susceptible newborn.

The 24-year-old mother of this full term infant was exposed to a child with chickenpox approximately 14 days before delivery. Although both she and her parents recalled her having chickenpox in childhood on May 8 she developed truncal vesicles in association with a low fever. The next day, she delivered a healthy male. After consultation with the Epidemiology Office, the attending physician decided to administer VZIG to the infant. VZIG, procured from the Puget Sound Blood Center, Seattle (206-292-6525), was administered to the infant on the third day of life.

Acute and convalescent sera from the mother were submitted to the Centers for Disease Control, Atlanta; a 16-fold rise in titre of varicella antibody was demonstrated. Mother did well, and the infant had a healthy stay in hospital. At two weeks of age, he developed several vesicles without complications. A serum sample taken six weeks later has been submitted for varicella antibody (which should be present in high titer if the vesicles were caused by varicella).

Chickenpox is generally a mild illness, and most adults are immune through prior infection. Although VZIG will only rarely be indicated, its administration to an exposed newborn, at high risk of life-threatening complications of unattenuated disease, can be invaluable.

A complete report on VZIG was published on February 24, 1984 in the MMWR. Copies of this report can be obtained from the Epidemiology Office. Questions concerning the use of VZIG in individual circumstances are welcome.

(Reported by Marcus Deede, M.D., Soldotna; Jane Rusk, RN, Central Peninsula Hospital)