Preconception and Pregnancy

– Determine Immunity

• Past history of varicella, consider immune (if exposure to varicella occurs in pregnancy, it is now recommended to confirm immunity with serology)

• No history of varicella, consider serology (Varicella IgG) as may be immune despite no known history

• Adults are likely immune from past infection but this may change in the future with the introduction of chickenpox vaccination (2004 in Ontario)

• Adults less likely to be immune if from a developing country

• Serology is sent to Public Health Ontario Lab in Toronto for testing, approximately 5 working days for results

• If urgent i.e. exposure - order stat, indicate pregnant, verbal results may be available sooner (testing done daily, M-F)

• For verbal results call Public Health Ontario Lab in Toronto at 1-877-604-4567

Management if Non-immune

Preconception:

• Offer varicella vaccine (2 doses ≥ 6 weeks apart), wait ≥ 1 month from 2nd dose before trying to conceive

• Vaccine effectiveness > 98% at 10 years after 2 dose series

• Current serology testing used may not be sensitive enough to determine immunity from vaccine, consider immune after 2 doses of vaccine

Pregnancy:

• Avoid exposure to varicella; immunization of healthy, non-immune family members is recommended

• Recommend vaccine series after delivery if no infection occurs during pregnancy

Exposure to Varicella during pregnancy

• The following situations are considered significant exposures to a person with varicella while infectious:

  □ Continuous household contact (that is, living in the same dwelling) with a person with varicella

  □ Being indoors for more than 1 hour with a person with varicella

  □ Being in the same hospital room for more than 1 hour, or more than 15 minutes of face-to-face contact with a person with varicella

  □ Touching the lesions or articles freshly soiled by discharges from vesicles of a person with active varicella

• Infectious period- as long as 5 days but usually 1-2 days before onset of rash and continuing until lesions are crusted (usually about 5 days)

• Seronegative, or no history of varicella and too late for serology - VarIg (varicella zoster immune globulin) recommended

• Note- persons from developing countries have higher incidence of being non-immune

VarIg (varicella zoster immune globulin)

• VarIg (VariZIG™) can be ordered from hospital blood banks - call ahead to Cambridge or Grand River Hospital - may be picked up by patient and brought directly to physician’s office for administration

• Intramuscular administration, usually 4-5 injections

• Administer as soon as possible, preferably within 48-96 hours, but can be given up to 10 days after exposure

• Protection lasts 3-4 weeks
• May not completely prevent infection but expected to reduce severity of infection both for mother and baby

• Patient should be advised to contact physician ASAP if infection develops. Some experts advise oral acyclovir in the 2nd and 3rd trimester particularly if > 100 lesions or history of respiratory co-factors; close monitoring for pneumonitis important, onset usually in the first week after onset of rash

Management of Varicella Infection in Pregnancy

• If woman develops varicella within 5 days prior to or within 48 hours after delivery neonate is at high risk of severe infection and VarIg should be given to newborn infant

• Pregnant women are at risk of pneumonitis, usually viral, which can be life threatening if not treated appropriately, especially in the third trimester (incidence of pneumonitis 5-10%, most commonly occurs day 4 or later)

• Consultation/referral to obstetrician recommended regarding management for pregnant woman and appropriate follow up to screen for fetal consequences of infection

• Risk to fetus (1-3% baseline risk of congenital anomaly for all pregnant women):
  □ 1st 12 weeks: < 1% (0.4-0.7%) above baseline
  □ 13-28 weeks: < 2% above baseline
  □ > 28 weeks: no increased risk above baseline (unless develops within 5 days before or 48 hours after delivery as above)

• Congenital risks include limb hypoplasia, eye and brain damage, skin lesions

References


See also: fact sheet for the general public

Chickenpox and Pregnancy

Alternate formats of this document are available upon request.