Anaphylaxis during pregnancy, labor and delivery can be catastrophic for the mother and, especially, the infant. Symptoms and signs can include intense vulvar and vaginal itching, low back pain, uterine cramps, fetal distress, and preterm labor. During the first three trimesters, etiologies are similar to those in non-pregnant individuals. During labor and delivery, common etiologies are beta-lactam antibiotics, natural rubber latex, and other agents used in medical and peri-operative settings.

Important caveats in management include injecting epinephrine (adrenaline) promptly, providing high-flow supplemental oxygen, positioning the mother on her left side to improve venous return to the heart, maintaining a minimum maternal systolic blood pressure of 90 mm Hg to ensure adequate placental perfusion, and continuous electronic monitoring. Cardiopulmonary resuscitation and emergency Cesarean delivery should be performed when indicated.

In all women of child-bearing age, allergy/immunology specialists can help to prevent anaphylaxis in pregnancy through pre-pregnancy risk assessment and risk reduction strategies, such as confirming the etiology of systemic allergic reactions, providing written instructions for allergen avoidance, and initiating relevant immune modulation. In pregnant women, the benefits versus risks of skin tests, challenge tests, desensitization, and initiation of immunotherapy with allergens should be carefully weighed; if possible, these procedures should be deferred until after parturition. Prospective, inter-disciplinary studies of anaphylaxis during pregnancy are needed.

REFERENCE: