



Last week we at **Mishpacha** and the Jewish world were shocked and saddened by the sudden death of Adira Boltshauser, a“h, the young wife of **Mishpacha**’s popular photographer Yehuda Boltshauser. The cause of her tragic death was eclampsia. What is eclampsia and how can it be detected?

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I am so sorry to hear of this tragic loss to your family and community. Unfortunately, I have seen what you describe happen from time to time, and it is always devastating. May this be an opportunity to prevent, if possible, future devastation in other families. I am happy to have this opportunity to educate **Family First**’s readers about this tragic disease.

To get technical for a moment, preeclampsia or toxemia is defined as high blood pressure in pregnancy with protein in urine, and it occurs in up to 10 percent of pregnancies. It is the most common cause of maternal mortality in the US with postpartum bleeding being the most common cause of bleeding in the developing world. Believe it or not, in this age of so many incredible medical advances, the only cure for preeclampsia is delivery of the baby.

Eclampsia refers to the occurrence of one or more generalized convulsions and/or coma in the setting of preeclampsia. The causes of the seizures are unknown, but are likely related to high blood pressure in the brain. Perhaps you think that your recent loss is one in a million, but unfortunately, despite advances in detection and management, preeclampsia and eclampsia remain a common cause of maternal death in the United States.

Eclampsia, which is a more serious condition, complicates 6 in 10,000 maternities in the developing world and carries a maternal mortality of 1.8 percent. In developing countries, the incidence has been up to 100 per 10,000. HELLP syndrome (a major liver and clotting disorder) is even more common, probably about 1 in 500 maternities, but may be as dangerous as eclampsia itself. These two major maternal disorders can present without signs of preeclampsia. Thus, prediction and severity of disease is very difficult.

If you or someone you love is expecting, it is important to know the risk factors for eclampsia and preeclampsia, which are: nonwhite, first baby or more than fifth baby, under age 20 or over age 35, previous preeclampsia, family history of preeclampsia, chronic hypertension, chronic renal disease, anti-phospholipid syndrome or inherited thrombophilia, vascular or connective tissue disease, diabetes, multiple gestation (twins or greater), high BMI, growth restriction, prolonged interpregnancy interval, and fetal growth restriction. Of course, your doctor will alert you if any of these factors are relevant for your pregnancy care.

Prompt delivery of the baby is the only cure. Induction of

labor is not contraindicated, but 75 percent of babies are delivered by cesarean after an eclamptic seizure. The good news is that postpartum, eclamptic seizures resolve within days. Anticonvulsant medications are generally administered for 24–48 hours postpartum to avoid recurrent seizures.

Complications occur in up to 70 percent of women with eclampsia, including abruption placentae, disseminated intravascular coagulation, acute renal failure, liver failure, cerebral hemorrhage, cardiac arrest, acute pulmonary edema, and postpartum bleeding. HELLP syndrome (Hemolysis, Elevated Liver enzymes, Low Platelets) develops in approximately 10–20 percent of women with preeclampsia/eclampsia. Cerebral hemorrhage is a lesion that can kill women with preeclampsia/eclampsia. Cerebral hemorrhage is a known complication of severe hypertension in other contexts.

The relationship between hypertension cerebral symptoms (headache, visual disturbances, nausea, vomiting, fever) and seizures remains unclear. The magnitude of blood pressure elevation does *not* appear to be predictive of eclampsia, but it *does* correlate well with stroke. Twenty to 38 percent of eclampsia seizures will have normal blood pressure and 20 percent will have no protein in the urine. Thus, and this is the frightening point here, for one-third of women with eclampsia, their medical response to this condition is completely unpredictable.

Preeclampsia is a very common and confounding disease of pregnancy. The medical profession is very frustrated by having a disease for which the cause is still unknown and the only treatment is delivery of the baby. The rare and serious disease eclampsia/HELLP syndrome can have devastating effects on maternal and fetal wellbeing.

If you are expecting and experience high blood pressure (more than 140/90), protein in the urine, headaches, changes in vision or blurry vision, dizziness, upper abdominal pain (usually on the right over the liver), nausea or vomiting, sudden change in weight (more than 2 lbs a week), decreased urine output, and/or swelling of hand and face, consult your physician immediately, as these can all be signs of potential preeclampsia. This disease underlies the importance of proper prenatal care and delivery in an experienced hospital.