Trauma and pregnancy: what should we take into consideration?

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Trauma is one of the major non-obstetric causes of pregnancy-associated maternal deaths. Most cases of maternal trauma include: motor vehicle crashes, domestic violence, falls, burns, suicide, and toxic exposure. Pregnancy-related anatomic and physiologic changes like increased joint laxity, weight gain, and changes in the center of gravity during pregnancy increase the risk of falling. One of the important challenges that physicians must face in the evaluation and management of traumatiized pregnant women is pregnancy-related anatomic and physiologic changes.

Management of these patients requires multidisciplinary coordination between groups of physicians. The role of obstetricians on this team is as consultants to determine the need and time of emergency delivery by considering this rule, “saving the mother’s life has superiority to the fetus”.

As in nonpregnant patients, the first step in evaluation is to establish maternal cardiopulmonary stability: airway, breathing, and circulation. Then, a physical examination and ultrasound are done to evaluate gestational age, the uterine size, and fetal viability. Cases for the viability of fetus require:

Antenatal glucocorticoids administered to women at risk of preterm delivery;

Continuous fetal monitoring continued for 2–6 hours and, Urgent Cesarean delivery done in cases of imminent maternal death, ineffectiveness of cardiopulmonary resuscitation within four minutes, or nonreassuring fetal heart rate in stable patients or when the gravid uterus prevents adequate surgical exposure during laparotomy.

Uterine rupture, abruptio placentae, fetomaternal hemorrhage, preterm labor, and premature rupture of membranes are other complications of trauma in pregnancy. Management of such complications, outcome, and prevention of trauma during pregnancy are discussed.

Keywords: Pregnancy, Trauma, Urgent caesarian delivery