

SJMHS Labor and Delivery, Surgery, and Emergency Room Guideline

Management of the Pregnant Trauma Patient

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Labor and Delivery, Surgery, Emergency Room

Intrapartum

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Approved by: Medical Director, Department of Obstetrics
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Guideline

There are a number of well-described physiologic as well as anatomic changes caused by pregnancy. In some manner, these changes affect virtually every organ system. The management priorities for the pregnant trauma patient, however, are the same as for the non-pregnant patient. The ABC's of trauma resuscitation remain the most critical factors for the survival and well being of both patient and fetus, as the fetus is totally dependent upon the integrity of the mother's physiologic status. The most effective way to protect the fetus is to rapidly and efficiently restore the patient's vital functions.

Procedure

- A. Initial Evaluation and Management
 1. ABC's of trauma resuscitation.
 2. Maintain cervical spine immobilization, if such an injury is suspected, while positioning the patient in a slight left lateral position, or with the right hip elevated. This will relieve pressure from the gravid uterus from the inferior vena cava, facilitating venous return to the heart.
 3. Give enough volume to support the physiologic hypervolemia of pregnancy. This allows for maintenance of uteroplacental blood flow.
 4. Vasopressors may further compromise the uteroplacental circulation and should be used judiciously.
- B. Monitoring
 1. Administer oxygen early and apply a pulse oximeter.
 2. Continuously monitor the patient's vital signs as appropriate.
 3. Ultrasonic Doppler fetal heart rate – any patient who sustains trauma and is pregnant with a gestation of at least 20 weeks, has suspected injury to the fetus and/or placenta, or any patient who complains of contractions, abdominal pain, vaginal bleeding or discharge after trauma should have fetal monitoring.
 - a. The Emergency Department physician will be notified immediately of the arrival of a 20week or greater pregnant patient who has sustained trauma.
 - b. The Labor and Delivery charge nurse will be notified (2-0331) when a pregnant patient ≥ 20 weeks who has sustained trauma and requires a fetal monitor arrives.
 - c. The Labor and Delivery charge nurse will notify the senior OB resident and the In House Obstetrician. AND will send appropriate LDR nursing resources to the Emergency Room.
 - d. The LDR staff will apply an electronic fetal monitor when applicable AND will be responsible for interpretation of the EFM. The LDR nurse will notify the OB resident/In house attending of any changes in FHR patterns.
 - e. Consider ultrasound of the uterus, placenta and fetus.
 - f. It is acknowledged that life-sustaining care of the mother is the first priority. Fetal monitoring will occur after the mother's needs have been met.
 - g. For airway management consider contacting OB anesthesia
 - h. All OB patients should remain NPO until assessment by the OB staff is completed.
- C. Secondary Evaluation
 1. Thorough head-to-toe evaluation, as with all trauma patients.

2. Proceed with indicated radiographic evaluation, as with any trauma patient. However, limited films should be considered.
 3. Be aware of the possibility of blood and/or amniotic fluid in the vagina. A pelvic examination may be a part of the physical examination, preferably in association with the obstetrician.
 4. Admit all patients with abdominal pain and/or tenderness, uterine irritability, hypovolemia, abnormal fetal heart tones, vaginal bleeding or leakage of amniotic fluid.
- D. Specific Complications
1. Placental abruption
 2. Amniotic fluid embolization
 3. Consumptive coagulopathy
 4. Iso-immunization of the RH-negative patient: at least one dose of Rhlg is administered to Rh-negative patients. The KBT results indicate additional required doses. Even if the patient has received Rhlg during the pregnancy additional Rhlg may be indicated. Transfusion service will order Rhlg to be distributed via pharmacy.
- E. Laboratory /blood bank analysis
- a. Order Kleihauer-Betke Test (KBT) and Rh Immune Globulin work up and send specimens to hematology and transfusion service.
 - b. Transfusion service will determine if additional testing must be completed (i.e. blood type and antibody screen or rely on historical records.) Hematology will perform the KBT.
 - c. If the physician opts not to administer Rhlg, the patient care staff must notify transfusion service.
- E. Disposition
1. Stable patient, stable vital signs, no abdominal tenderness nor vaginal bleeding, and the injuries are deemed to be minor and not requiring other services, the patient shall be sent to Labor and Delivery for continued monitoring.
 2. Unstable patients, or patients with serious unisystem or multisystem injuries shall be managed as any other seriously injured patient, with the advice and close consultation of the Obstetric staff.

Responsibility

LDR staff, Emergency Room Staff, Trauma Team.

Approval	Consultation	Committee/Person	Date
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