SUBJECT: Pregnant Trauma Patients **PAGE:** 1 of 3
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PURPOSE:

Guidance for evaluating and treating traumatically injured pregnant patients.

DEFINITIONS:

- Fetal viability: known ≥ 22 week fetus or estimated ≥ 20 weeks
- Perimortem Caesarian delivery: surgical delivery of a fetus during cardiac arrest

GUIDELINES:

Pregnant patients with traumatic injuries, suspected of reaching a gestational age consistent with fetal viability, will be a Level 1 or 2 Trauma Team Activation. Additionally, emergency obstetric teams (and neonatal, if deemed necessary) will respond to the trauma bay along with the Trauma Team for these patients.

- Trauma Team Activations will follow the UAMS Trauma Activation Criteria Guideline. Pregnancy raises the activation level (e.g., a Level 3 activation becomes a Level 2 activation, and a Level 2 activation becomes a Level 1 activation if the patient is pregnant with a viable fetus.
- A viable fetus is defined by **fetal viability** to accommodate for prehospital or transferring hospital underestimation of gestational age.

When a trauma patient requiring emergency obstetric response is reported en route or arrives unannounced at the trauma center, the ED Charge Nurse or designee is responsible for notifying the Emergency Obstetric, Neonatal, and Trauma Teams.

- The primary alerting mechanism activates both
  - Trauma Team group pager
  - Stork group pager
- In the event of the primary alerting mechanism failure, the emergency obstetric team can be contacted by calling Labor and Delivery by telephone at 501-526-0564, and the infant emergency group can contact the neonatal emergency team via Vocera. The OB chief resident can also be notified by calling the OB chief's cell at **501-231-6643.**

It is the intent that the evaluation of the fetus by the emergency obstetric team shall occur simultaneously with the assessment and initial management of the trauma patient by trauma and emergency medicine personnel.

- This will often require close coordination between anesthesia, emergency medicine, obstetrics,

trauma surgery attendings, and resident physicians.

If fetal distress or other findings warrant emergency Caesarian section, the case will be done in the main OR trauma room (usually OR 13, but it may be a backup room). (see "TRAUMA STAT Operating Room Access")

- Main OR rooms are equipped with all necessary Caesarian section and emergency neonatology equipment and supplies.

- Performing the Caesarian section in the main OR allows optimal management of other injuries which may be encountered.

- In unusual circumstances, selected Caesarian sections in Trauma patients may be performed in L&D with the concurrence of the obstetrics, trauma, and anesthesiology attendings.

A Perimortem Caesarian delivery section will take place in the location where the arrest occurs because outcomes are worse if the patient is moved. This will most often be the ED trauma bay.

- The indications for perimortem c-section are:
  - imminent maternal death
  - immediately at the time of loss of vital signs
  - within 4 min of unsuccessful CPR

- If present, the OB service will perform the Perimortem Caesarian delivery with the assistance of the trauma team. It will be performed through a vertical midline laparotomy

- Perimortem Caesarian delivery should occur before a resuscitative thoracotomy and open-heart massage because it results in better outcomes by removing the enlarged uterus, which stops the shunting of blood and improves the efficacy of CPR, which should resume after the delivery of the baby.

Trauma patients requiring admission who are pregnant at or beyond the gestational age of viability will be jointly managed by the Trauma and Obstetric services. The specific unit of admission will be determined by the services based on these guidelines:

- Patients requiring ICU care will be admitted to the SICU with continuous fetal monitoring as deemed necessary by the obstetric service.

- Patients with significant injuries but not requiring ICU admission will be admitted to the appropriate trauma unit with fetal monitoring as deemed necessary by the obstetric service.

- Patients with minor injuries will be admitted to the unit deemed appropriate by the obstetrics service, and the trauma service will follow until discharge.

Trauma patients requiring admission who are pregnant before the gestational age of viability will be managed by the trauma with obstetric or gynecology consultation. The specific obstetric or gynecologic care of these

patients will be determined individually.

- The primary goal of care of these patients will be optimal care of the mother.
- The mother's medical needs will determine where the patient is admitted. Rhogam will be considered case-by-case after consultation with the OB Attending.

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