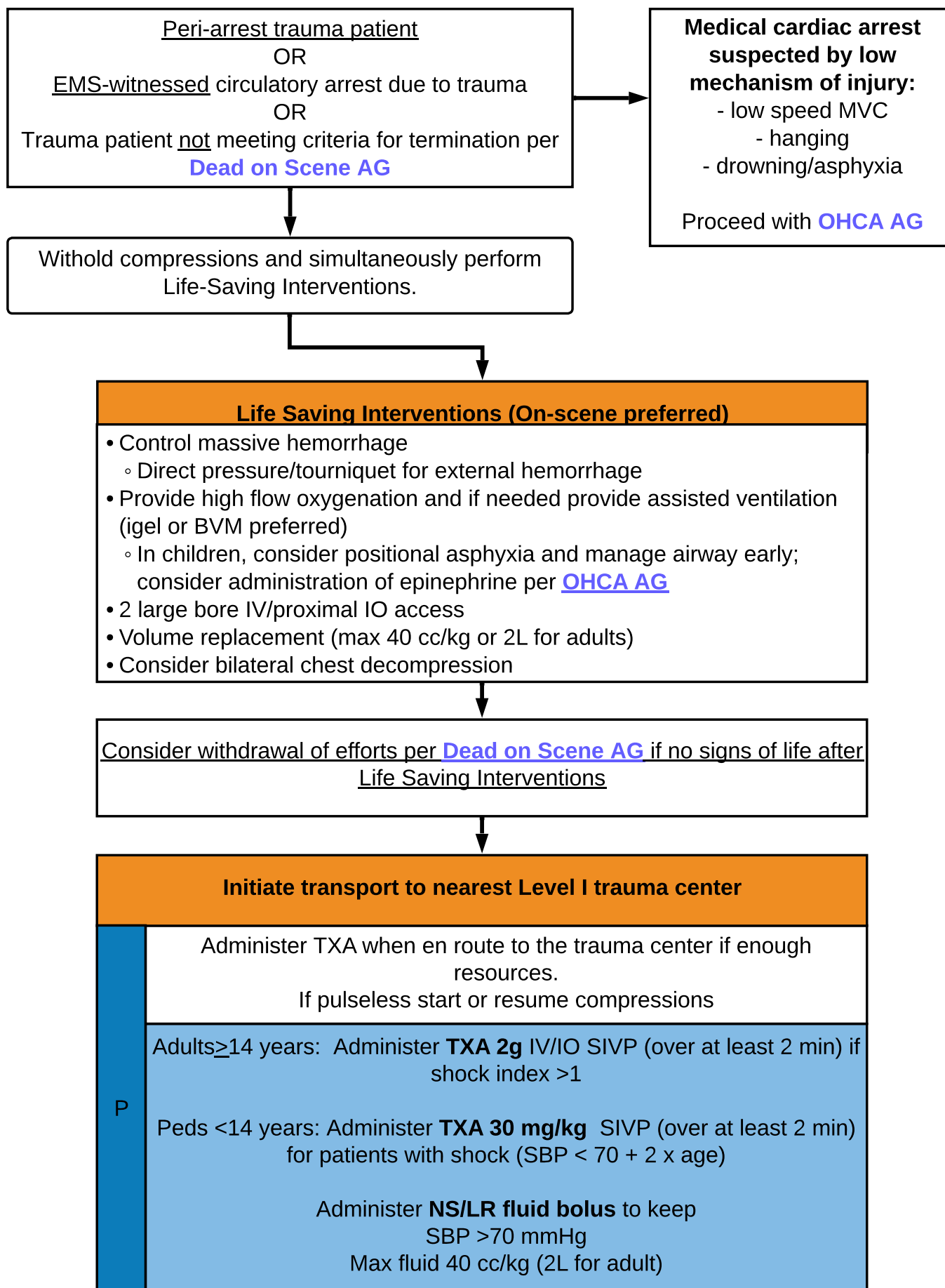


Traumatic Circulatory Arrest and Peri-Arrest Administrative Guideline





Education and Pearls

Cardiac arrest from trauma does not benefit from continuous resuscitation on scene for twenty minutes. Unless you suspect ventricular fibrillation from a strike to the chest (commotio cordis), your patient should be either receive Life-Saving Interventions and be transported/called on scene OR called on scene upon arrival via DOS criteria.

The initial cardiac rhythm for most patients in survivable traumatic cardiac arrest is pulseless electrical activity (PEA). This rhythm in traumatic cardiac arrest usually represents a very low output state caused by an obstruction (e.g. pneumothorax, pericardial tamponade) or hypovolemia (blood loss anemia), rather than a true "cardiac" arrest.

In cardiac arrest caused by hypovolemia, cardiac tamponade, or tension pneumothorax, *chest compressions are unlikely to be effective*. Subsequently, chest compressions take a lower priority than the immediate treatment of reversible causes (e.g. needle decompression, airway management, controlling hemorrhage, etc.). Performing chest compressions cannot only impair and hinder the performance of life saving interventions in trauma patients, they can - in some patients - cause significant harm; in a patient with extensive chest or rib injuries, for example, chest compressions may cause direct injury to underlying organs.

In cardiac arrest due to trauma, hemorrhage control, the restoration of circulating blood volume, opening the airway, and relieving suspected tension pneumothorax should take priority over conventional cardiopulmonary resuscitation (CPR) (i.e. external chest compressions, defibrillation, and epinephrine) unless a medical cause for cardiac arrest is reasonably suspected to have preceded the traumatic event.

This guideline is for trauma patients that are about to lose pulses or have lost pulses in front of EMS. It does not apply to those patients who would meet the criteria for termination based on the Dead on Scene AG.