COUNTY OF EL DORADO

HEALTH & HUMAN SERVICES

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MEMORANDUM

Date: July, 6 2015

To: All El Dorado County ALS Contractors

From: EDCEMS

Subject: UPDATED POLICIES

There were a couple of minor changes to the Spinal Immobilization and the Determination of Death policies. Please see the attached documents that have the changes highlighted.

Thank you!

EDCEMS

EL DORADO COUNTY EMS AGENCY
FIELD POLICIES

Supersedes: Policy dated July 1, 2009
Effective: **July 1, 2015**
Reviewed: April 8, 2015
Scope: ALS and Expanded Scope BLS Personnel

EMS Agency Medical Director

SPINAL IMMOBILIZATION

DEFINITIONS:

Focused Spine Assessment - An exam that utilizes mechanism(s) of injury, external factors, and specific physical exam findings to rule out potential spinal injury.

Spinal Motion Restriction (SMR) - Application of cervical/thoracic splint-collar and patient placed in a position of comfort on the gurney with normal seat belt straps applied.

Full-Spinal Immobilization – Application of cervical/thoracic splint-collar and patient placed on either a vacuum splint (preferred) or on a padded backboard or equivalent with head and body securely immobilized with straps and tape.

PURPOSE:

This policy shall be followed when circumstances indicate a potential for spinal injury. El Dorado County has recognized the importance in reducing the risks and complication associated with unnecessary spinal immobilization utilizing backboards, therefore the goal is to reduce unnecessary use of the backboard. Studies show that immobilizing trauma victims may cause more harm than good for the patient.

POLICY:

1. Any patient with a suspicion of spinal injury should be immobilized by prehospital personnel in either SMR or full-spinal immobilization, as is indicated.
2. A good clinical history and exam can limit the need for immobilization to the group of patients more likely to have an injury.
3. Patients who sustain a significant blunt mechanism of injury and who are unable to provide a reliable history and exam require SMR.
4. Penetrating trauma patients benefit most from rapid assessment and transport to a trauma center without SMR (see PENETRATING TRAUMA below).
5. Vehicle accident patients may self-extricate whenever possible. Application of a cervical/thoracic splint should be applied before extrication.
6. **ALS ONLY: For situations where a patient has been already been placed in spinal precautions prior to the arrival of paramedics: these patients may be either placed in SMR or cleared following a full spinal assessment, including a focused spinal exam.**

INDICATIONS:

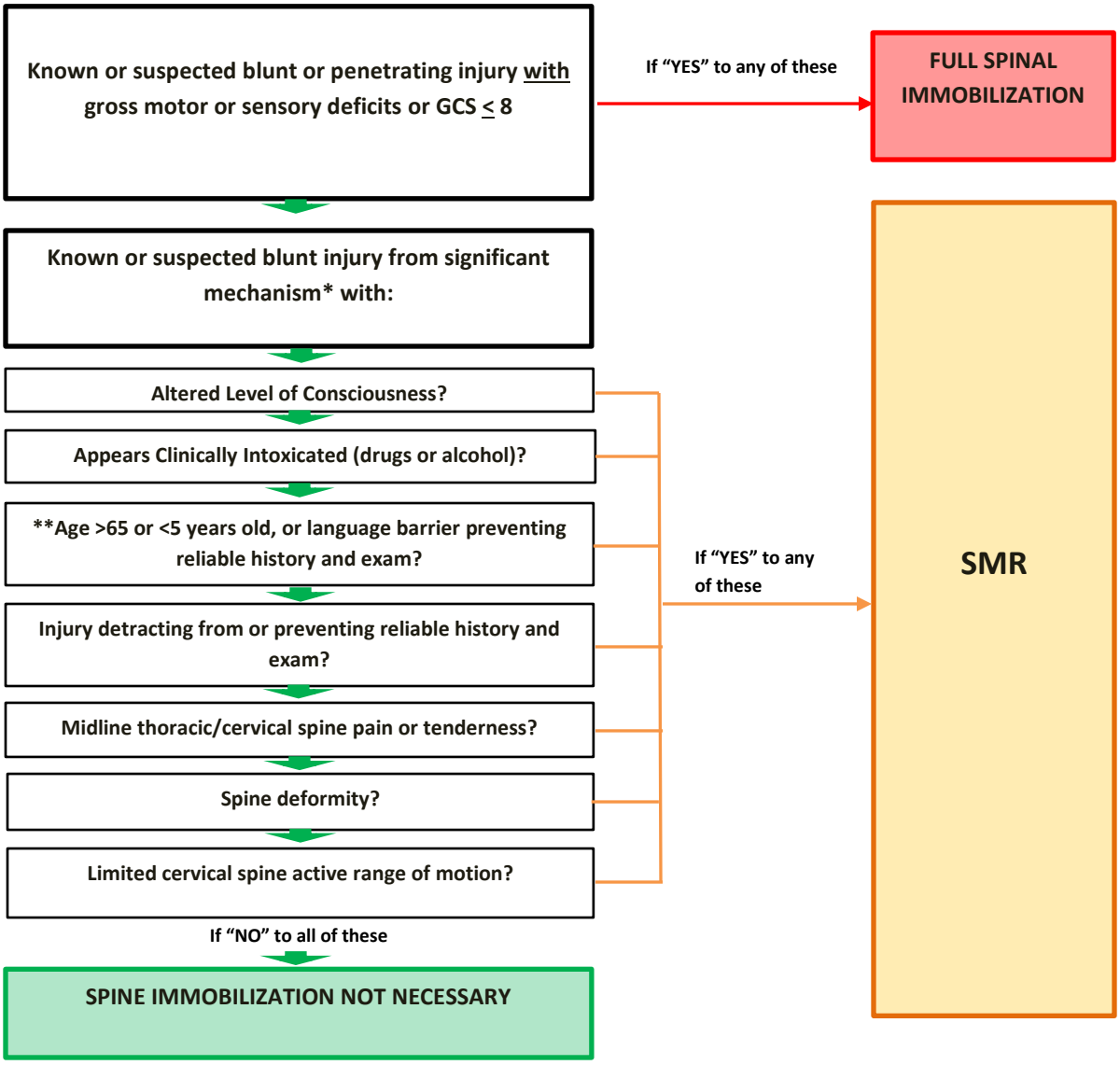
Consider SMR for any patient suspected of having a traumatic spinal injury.

PENETRATING TRAUMA (GSW/stab wounds): SMR or full spinal immobilization SHALL occur if any of the following are present:

- Obvious, gross neurologic deficit to the extremities
- Significant secondary blunt mechanism of injury (e.g., fall from height post stabbing)
- Priapism
- Neurogenic shock
- Anatomic deformity to the spine secondary to injury

SPINAL IMMOBILIZATION

FOCUSED SPINE ASSESSMENT ALGORITHM:



*Significant mechanism includes high-energy events such as ejection, high falls, axial loading, and abrupt deceleration crashes and may indicate the need for spinal immobilization.

**High risk populations (<5 or > 65 years old) should be immobilized (with SMR) even in low energy mechanisms.

Consider SMR in any patient with arthritis, cancer, dialysis or other underlying spinal or bone disease.

Any patient may be immobilized based on paramedic discretion.

Document the neurologic/CSM status of the patient before and after SMR or spinal immobilization on the PCR.

SPINAL IMMOBILIZATION

Focused Spinal Exam:

NO DISTRACTING INJURY	Can the patient focus on your exam or are they in severe distress from other injuries or emotional stressors? Long bone fractures, bleeding, joint deformity may or may not be distracting for an individual patient
NO MOTOR OR SENSORY DEFICITS	1. Assess bilateral grips/pedal pushes/pulls. • In the case of extremity injury they should be able to flex/extend at the ankles and wrists or move fingers and toes. The patient should be able to move all distal extremities 2. Check for sense of touch in all extremities by lightly brushing a gloved hand on each extremity.
NO FOCAL MIDLINE TENDERNESS OR DEFORMITY	Palpate the entire spine on the boney processes one at a time from C-1 to L-5. • The patient may complain of general back or spine pain, but should not have any focal MIDLINE tenderness to palpation or obvious deformity. Deformity would include but not limited to an obvious step off from one level to another or boney crepitus
NO LIMITED RANGE OF MOTION	Ask the patient to rotate their head 45 degrees side to side. Do not assist with this process. • If the patient has any pain they should be placed in SMR

Patients should be placed in SMR if any of the findings of these assessments are positive.

EL DORADO COUNTY EMS AGENCY
FIELD POLICIES

Supersedes: Policy dated July 1, 2013
Effective: July 6, 2015
Reviewed: July 2015
Scope: BLS and ALS Personnel

EMS Agency Medical Director

DETERMINATION OF DEATH

PURPOSE:
To provide criteria for prehospital personnel to determine when a patient is obviously dead and when resuscitative efforts should be discontinued.

PROCEDURE:
1. The patient is to be determined obviously dead upon meeting the following criteria:
    a. The patient has suffered one of the following:
        1) Decapitation.
        2) Decomposition of body tissue.
        3) Incineration.
        4) Known submersion for 90 minutes or longer.
        5) Functional separation from the body of the heart, brain, or lungs.
        6) Pulseless and apneic and **all** of the following physical exam findings are present*:
            - Rigor mortis as indicated by stiffness in jaw
            - Cold skin (in a warm environment)
            - Pupils dilated and non responsive
            - Asystole noted on EKG in two leads **(ALS personnel),** or;
            - No palpable carotid pulse is felt and no breath or apical heart sounds are heard after a minimum 60 seconds of auscultation and palpation **(BLS personnel only).**
        7) Adult patient with major blunt trauma that is pulseless and the monitor shows: *asystole or wide complex PEA* with a rate of 40 or less in at least two (2) leads. (**ALS personnel only**)
        8) The patient is in cardiac arrest* and has a reliable history of no vital signs for 20 minutes and presents with asystole in at least two (2) leads on the monitor. If a reliable history is not readily available or if there is evidence the patient is pregnant begin BCLS/ACLS procedures and contact base station for further instructions. (**ALS personnel only**)

    ***Patients with evidence of hypothermia, drug ingestion, or electrocution shall not have resuscitation measures withheld unless approved the base station physician.**
2. When an obvious death is determined in the field:
    a. A Prehospital Care Report (PCR) shall be completed with all appropriate patient information. It shall describe the patient assessment and the time the patient was determined to be obviously dead.
    b. Base station contact is not required for patients determined obviously dead unless otherwise specified in this policy.
3. For patients who do not meet the "obviously dead" determination of death criteria appropriate treatment measures shall be instituted:

a. The base station physician may determine that resuscitative interventions are futile or not indicated, and may authorize the discontinuation of resuscitative efforts if **all of the following are present:**
   i) No spontaneous respirations are present after:
      - Assuring the patient has an open airway
      - Looking, listening, and feeling for respirations including chest auscultation for lung sounds for a minimum of 60 seconds, and;

   ii) No pulses are present after:
      - palpation of the carotid pulse for a minimum of 60 seconds and/or auscultation of the apical pulse for a minimum of 60 seconds
      - The adult patient is in pulseless arrest (asystole, PEA, refractory VT/VF) for more than 20 minutes despite **(on-scene)** ACLS resuscitative measures, assuming the patient has an effective BLS or ALS airway and a patent IV/IO in place.
      - There is no suspected history of drug ingestion, hypothermia, or electrocution
      - The Paramedic determines the scene to be appropriate for termination of resuscitative measures

b. Following an order by the base station physician to discontinue resuscitative measures, a PCR shall be completed. All appropriate patient information must be included, and a description of all resuscitative efforts employed, criteria outlining discontinuation of resuscitative efforts, and the time the base station physician determined the patient to be dead.

c. BLS personnel may determine a patient to be dead if patient is pulseless and apneic as defined in section 1 of this policy after twenty minutes of CPR (unless there is evidence of hypothermia, drug ingestion, drowning, or electrocution).

d. In the event that radio contact cannot be made with the base station and there is no evidence of pregnancy the Paramedic may make a determination of death in pulseless, apneic patients as described above. Paramedics must make base station contact once radio contact can be made. An EMS Event Analysis form shall be submitted to the EMS Agency Medical Director within 24 hours in all cases where resuscitative measures were discontinued during radio failure.

e. Prehospital emergency medical care personnel shall notify the County Coroner or the appropriate law enforcement agency when a patient has been determined to be dead. The most appropriate EMS unit (may be the first responders) shall remain on scene until released by the coroner or law enforcement agency. In the event that the deceased subject is in a public occupancy, the body may be transported to the nearest medical facility depending on the circumstances and the ETA of the County Coroner/law enforcement. Leave all IV/IO lines and airway adjuncts in place.

4. Transport of deceased patients:

a. Patients who are dead at the scene should not be transported by ambulance; however, for patients that collapse in public locations it may be necessary to transport to the hospital or other location in order to move the body to a place that provides the family with more privacy.

b. When resuscitative measures have begun and the decision is made to transport **OR** if resuscitation begins en route, **Do Not** discontinue measures, continue to destination hospital or divert to nearest hospital.

Policies and procedures relating to medical operations during declared disaster situations or multiple casualty incidents will supersede this policy.

Reference(s):

A proposed decision-making guide for the search, rescue and resuscitation of submersion (head under) victims based on expert opinion Original Research Article
Resuscitation, Volume 82, Issue 7, July 2011, Pages 819-824
Michael J. Tipton, Frank St. C. Golden