

Kittitas County Prehospital Care Protocols

Subject: PROTOCOLS FOR THE IV TECHNICIAN – DOH Addendum

The purpose of this document is to provide written protocols for EMT-IV Technicians certified and practicing in Kittitas County in conjunction with the Washington State Intravenous Therapy Technician Field Protocols (revised July 2000).

I. Cardiovascular Problems

A. Chest Pain

1. Administer O₂ at 15 L/min per non-rebreather mask.
2. A minimal amount of time should be spent at the scene. Expedite transport to a facility capable of providing thrombolytic therapy.
3. While en route to the receiving facility, establish peripheral IV access with 0.9% NaCl @ TKO.

B. Cardiopulmonary Arrest

1. Verify cardiopulmonary arrest.
2. Initiate CPR and ventilate per pocket mask or BVM with supplemental O₂ @ 15 L/min.
3. While en route to the receiving facility, establish peripheral IV access with 0.9% NaCl TKO.
4. If other procedures, such as defibrillation, Combitube intubation, and/or Endotracheal intubation are being performed, an IV can be established at the scene, so long as there is **no** delay in treatment and transport.

C. Pediatric Cardiopulmonary Arrest

1. Verify cardiopulmonary arrest.
2. Initiate CPR and ventilate per pediatric BVM with supplemental O₂ @ 15 L/min.
3. While en route to the receiving facility, establish peripheral IV access with 0.9% NaCl @ TKO.
4. Discontinue the procedure after **one** unsuccessful attempts at peripheral venipuncture.
5. **Attempt I.O. on children under the age of six only.**

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- D. Syncope/Stroke
 - 1. Administer O₂ at 15 L/min per non-rebreather mask.
 - 2. While en route to the receiving facility, establish peripheral IV access with 0.9% NaCl @ TKO.
 - 3. **Draw blood per current lab standards** prior to IV fluid infusion.
- E. Congestive Heart Failure with Acute Pulmonary Edema
 - 1. Administer O₂ at 15 L/min per non-rebreather mask.
 - 2. Provide positive –pressure ventilation as necessary.
 - 3. While en route to the receiving facility, establish peripheral IV access with 0.9% NaCl @ TKO.

II. Diabetes Mellitus

- 1. Establish and maintain airway.
- 2. Administer O₂ @ 15 L/min per non-rebreather mask.
- 3. If good airway and patient is conscious, administer large amount of some type of **sugar solution**, orally.
- 4. While en route to the receiving facility, establish peripheral IV access with **NaCl** @ TKO.
- 5. Draw one clot tube of blood prior to infusion of **NaCl**.
- 6. **Perform blood glucose check. If blood sugar is > 500 and there is no sign of CHF, give 500 cc fluid Bolus.**

III. Hypotension—Unknown Etiology

- 1. Establish and maintain airway.
- 2. Administer O₂ @ 15 L/min per non-rebreather mask.
- 3. If trauma is present, refer to trauma protocols.

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4. Consider application and inflation of the PASG in accordance with protocols.
5. Establish large-bore IV catheter with 0.9% NaCl & titrate fluid to challenge patient's BP and clinical findings. **If there are no signs of CHF, give 500cc ~ 10 minutes fluid bolus en route. If there is no improvement in BP, provider should contact medical control.**
6. If no improvement from IV fluid challenge and no signs of pulmonary edema, while en route to the receiving facility, establish a second IV with **NaCl**, and run both up to approximately 1500 ml.

IV. Trauma

1. Establish and maintain airway.
2. Administer O₂ at 15 L/min per non-rebreather mask.
3. Moderate or severe shock and/or severe trauma, apply and inflate all sections of the PASG when medically appropriate.
4. Serial vital signs.
5. Unless extended extrication or multiple patients, on-scene time should be approximately **10 minutes**.
6. In all cases that may result in significant blood loss and/or severe trauma;
 - a. While en route to the receiving facility, establish large-bore IV catheter with **NaCl**, and if systolic BP \geq 90 mm Hg run @ an appropriate rate to maintain BP.
 - b. If systolic BP < 90 mm Hg, run wide open and establish a second large-bore IV; aim to maintain systolic BP to at least 90 mm Hg.
7. In severe trauma, as many procedures as possible should be performed en route to the receiving facility. Venipunctures may be performed at the scene, so long as transport will **not** be delayed by doing so.

V. Pediatric

1. Administer O₂ @ 15 L/min per non-rebreather mask. If not tolerated, administer blow-by oxygen.
2. Perform other BLS procedures as indicated, in accordance with protocols.

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3. In the patient with significant blood loss and/or severe trauma, while en route to the receiving facility;
 - a. Establish peripheral IV line with **NaCl**, and bolus @ 20 cc/kg, using a pressure infusion device or syringe.
 - b. Discontinue procedure for children < six years old after one attempt at peripheral venipuncture.
4. ***Intraosseous Infusion:*** To establish a route for drug or fluid resuscitation of an infant or child (under the age of 6 years) who is unconscious, unresponsive, and in need of immediate life-saving intervention and there is an inability to establish a peripheral line within 90 seconds. Refer to *Washington State Intravenous Therapy Technician Field Protocols (revised July 2000)*, for complete protocol.

VI. Obstetrical Emergencies

1. Obtain history and perform detailed physical exam.
2. Administer O₂ @ 15 L/min per non-rebreather mask.
3. If scene delivery is imminent, establish a large-bore IV catheter with **NaCl** running @ wide open.
4. If scene delivery is *not* imminent, while en route to the receiving facility, establish a large-bore IV catheter with **NaCl** running @ TKO.

VII. Other Protocols

1. IV Technicians may not establish **saline** locks. IV Technicians may not attend patients with **saline** locks established by hospital personnel, except on local inter-facility transports.
2. **Cannulation of the external jugular vein is not permissible by IV Technicians.**
3. Peripheral IV access should be established en route to the receiving facility, unless allowed per protocol.
4. The IV Technician should discontinue procedure after three unsuccessful attempts at venipuncture for adults and one unsuccessful attempt at venipuncture for pediatric patients < six years old.

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5. At no time, should establishing peripheral access take precedence over basic life support procedures.
6. When requested by Law Enforcement, blood draws may be performed if peripheral access is already established. Treatment and transport should **not** be delayed to perform a blood draw.
7. For situations not described in these protocols, or for other basic life support procedures, the EMT-IV Technician is to operate under the *Washington State Intravenous Therapy Technician Field Protocols (revised July 2000)*.
8. IV Technicians may attend and serve as the lead provider on local, inter-facility transfers for patients who have been administered medications < 2 hours prior to transport or who are currently being administered medications.
9. IV Technicians may attend and serve as the lead provider on out-of-town, inter-facility transfers for patients who have received medications > 2 hours prior to transport.

Latest changes are in **Bold**.

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