Medical Procedures IV Antibiotic Continuation

I. <u>Purpose:</u>

A. To establish indications, guidelines, and the standard procedures for administering IV antibiotics in patients with known or suspected bacterial infections.

II. <u>Authority:</u>

A. Health and Safety Code, Section 1797.220, 1798. Title 22, Section 100170.

III. <u>Policy:</u>

- A. Antibiotics may be continued under the following indications:
 - 1. Known or suspected infection requiring treatment with antibiotics
 - 2. IV antibiotics were begun by facility personnel prior to transfer of care to EMS
- B. Contraindications for continuation IV antibiotics:
 - 1. Known allergy or sensitivity to the medication
 - 2. Prior to transport the patient has evidence of poor perfusion, is hypotensive, in septic shock, and/or on vasopressors to maintain their blood pressure
 - 3. Initiating an antibiotic infusion by EMS
 - 4. If a provider has not completed training on antibiotic continuation, or has clinical concerns about administration of the medication
- C. Document the following in the patient care record:
 - 1. Signs and symptoms indicating need for medication
 - 2. Base station contact
 - 3. Suspected complications or side effects from treatment
 - 4. Response to treatment
- D. Documentation:
 - 1. This protocol is for Local Optional Scope of Practice paramedic who have completed the training
 - 2. The medication (antibiotic) needs to be documented in the medication section and the narrative sections

IV. <u>Procedure:</u>

- A. This will depend on the antibiotic to be infused. This will be confirmed with the physician and RN prior to leaving the facility. The infusion rate will be per the sending facility and be documented on the IFT written orders.
 - 1. Antibiotics will be administered by infusion pump or an in-line rate control device, such as a Dial-A-Flow.
 - 2. Antibiotics shall never be administered by IV push or via non-controlled gravity sets (Macro or Micro drop).
 - 3. Typical infusion rates are from 30 to 60 minutes in total. The only exception is Vancomycin which is up to 120 minutes depending upon the total dosage.
- B. Monitor patients for adverse side effects including:
 - 1. Allergic reaction or anaphylaxis.
 - 2. Ototoxicity
 - 3. Localized reaction to the infusion: redness/burning at the intravenous site.
 - 4. IV infiltration
- C. Administration
 - 1. Supplemental oxygen available and pulse oximeter continuously monitoring with goal of SpO2 $\geq 94\%$
 - 2. Cardiac monitor to be placed and treat arrhythmias according to standard protocols
 - 3. Paramedic confirms the five "rights" of medication administration

- 4. Verify infusion rate with RN and MD prior to acceptance of patient
- 5. The paramedic cannot alter the rate of the infusion
- 6. Verify the total time remaining on the infusion prior to departure
- 7. The patient needs to have two functional IV sites prior to the IFT
- 8. If the infusion is completed during transport, save the infusion bag and continue the IV at TKO or the rate previously ordered
- 9. After the antibiotics are completed then flush the IV line
- 10. If the IV infiltrates the paramedic can restart a new IV and continue the infusion
 - a. Two IVs should be working when antibiotics are infusing
- 11. The paramedic can either monitor the infusion or stop the infusion if needed
- 12. No other medications can be infused along with the antibiotics.
- 13. If patient develops signs or symptoms of an adverse drug reaction, allergic reaction, or anaphylactic reaction:
 - a. Immediately stop the infusion
 - b. Disconnect infusion
 - c. Follow the standing orders for allergic reaction, anaphylaxis, and/or shock
 - d. Notify Base Station of the allergic reaction or anaphylaxis
 - e. Notify receiving and sending hospitals of reaction at completion of transport

D. Quality Assurance:

- 1. All IV antibiotic continuation administrations will undergo review by provider agency, the Imperial County EMQAAR committee and standard data elements shall be reported
- 2. The provider agencies shall review 100% of these cases each month
- 3. Submit any adverse outcomes to the EMS agency immediately within 48 hours
- 4. The provider agencies need to submit quarterly summary report to the EMS agency

APPROVED:

Signature on File Katherine Staats, M.D. EMS Medical Director