

## Skill Sheet

### Intravenous Infusion of Ketamine

**Objective:** DEMONSTRATE the correct procedure for administering the recommended dose of ketamine via the intravenous route.

**References:**

Tactical Combat Casualty Care for Medical Personnel.

**Evaluation:** Students will be evaluated as a Pass/Fail (P/F). The instructor will verify the student's ability to administer ketamine intravenously by observing the student's procedure and technique.

**Materials:**

Rugged field saline lock materials  
IV medication trainer  
Simulated 20-ml multi-dose vial of ketamine, 10 mg/ml  
10-cc syringe  
One-inch, 18-ga needles  
NS, 100-cc mini-bag  
Alcohol swabs  
TCCC Card (DD Form 1380)  
Sharps container

**Instructor Guidelines:**

1. Ensure each student has all required materials.
2. Read the Learning Objective and the evaluation method to the students.
3. Explain the grading of the exercise.

**Performance Steps:**

1. Prepare and inspect equipment.
2. Initiate a rugged field saline lock on the IV trainer.
3. Explain the procedure as if to the casualty and verbalize the need to ask about known allergies.
4. On the simulated medication vial, confirm the correct concentration of ketamine – 10 mg/ml.
5. Clean the top of the vial with an alcohol swab.
6. Attach a needle to the 10-cc syringe.
7. Draw 2 cc of air into the syringe.
8. Insert the needle into the vial and inject 2cc of air.
9. Withdraw 2 cc of simulated ketamine solution into the syringe.
10. Confirm a total dose of 20 mg of ketamine in the syringe.
11. Withdraw the needle from the vial.
12. Detach the used needle from the syringe and discard it into the sharps container.
13. Attach a new needle to the syringe.
14. Clean the port on the 100-cc mini-bag of NS with an alcohol swab.
15. Insert the needle into the port of the mini-bag.
16. Draw 8 cc of NS into the syringe.
17. Withdraw the needle from the port of the mini-bag.

18. Detach the used needle from the syringe and discard it into the sharps container.
19. Attach a new needle to the syringe.
20. Clean the injection port on the saline lock with an alcohol swab.
21. Insert the needle into the port.
22. Push in the 10 cc of diluted simulated ketamine solution over one minute.
23. Withdraw the needle from the port.
24. Discard the needle/syringe into the sharps container.
25. Verbalize observing the casualty for the desired clinical effect and adverse side effects.
26. Document medication administration on the TCCC card.

### Administer Ketamine Intravenously

Task	Completed		
	1st	2nd	3rd
Prepared and inspected equipment.	P / F	P / F	P / F
Explained the procedure to the instructor, in lieu of a casualty, and mentioned the need to inquire about known allergies.	P / F	P / F	P / F
Assured correct concentration of ketamine.			
Correctly diluted 2 cc of simulated ketamine solution (10 mg/ml) in 8 cc of NS for a total dose of 20 mg of simulated ketamine in 10 cc total volume in the syringe.	P / F	P / F	P / F
Infused the 10 cc of simulated ketamine solution over one minute.	P / F	P / F	P / F
Verbalized observing the casualty for desired clinical effect and adverse side effects.	P / F	P / F	P / F
Properly discarded needles and syringe.			
Maintained aseptic technique throughout.	P / F	P / F	P / F
Documented administration of ketamine on the TCCC card.	P / F	P / F	P / F

**Critical Criteria:**

- \_\_\_\_\_ Did not check for medication allergy.
- \_\_\_\_\_ Did not properly mix the correct dose of ketamine in the syringe.
- \_\_\_\_\_ Did not infuse the contents of the syringe over one minute.
- \_\_\_\_\_ Violated aseptic technique.
- \_\_\_\_\_ Did not properly dispose of needles and/or syringe.

**Evaluator's Comments:**

Student Name: \_\_\_\_\_ Date: \_\_\_\_\_

Evaluator: \_\_\_\_\_ Pass: \_\_\_\_\_ Fail: \_\_\_\_\_