University of Georgia Sports Medicine
IV Fluid Replacement Policies and Procedures

Revised June 30, 2005

Fluid Replacement Introduction

IV fluid replacement may be utilized in care of the athlete who is dehydrated, severely cramping, in shock, or as a part of emergency medical care in a potentially life-threatening situation. This procedure may be performed by athletic training staff who:

1. are emergency medical technician-intermediates (EMT-I) and have IV fluid replacement training;

2. who have **verbal orders from the team physician or physician assistant** in regards to IV insertion, IV fluid selection, and flow rates after consulting regarding patient's current signs and symptoms and medical history. If, however, in the clinical opinion of the ATC/EMT-I, the athlete is in a life-threatening situation that would benefit from IV access and a MD verbal order is not immediately available then the ATC/EMT-I should call 911 and may attempt to establish an appropriate IV per protocol procedure.

In serious hypovolemia, fluid replacement is an emergency procedure. Once the emergent need for an IV arises and appropriate orders are received, the ATC/EMT-I is to attempt to start the IV in the antecubital fossa with a large bore catheter (18 gauge or larger). This site provides good access to large veins and allows for easy care and monitoring of the patient. If there is difficulty obtaining adequate IV access using a large bore catheter then a smaller bore catheter (18-22 gauge) may be used at the antecubital fossa or a more distal vein pending ambulance transfer or arrival of physician and/or paramedics. If hypovolemia is not a clinical issue and the patient is stable, routine use of a smaller catheter (18-22 gauge) at a distal vein site is acceptable. A macro-drip infusion set (10 or 15 drops per milliliter) is used with the administration set. For rapid infusion, hand pressure, a blood pressure cuff, or commercially available pressure infusion device may be used to increase fluid flow.

Procedures for IV Fluid Replacement

- Proper use of personal protective equipment (per OSHA guidelines)
- Attempt to perform IV in the most appropriate clinical environment unless a true medical emergency exists
- Document patient's symptoms and vital signs on IV documentation form (consider orthostatic B/P and pulse in patient's who may be dehydrated)
- Select proper fluid
- Inform the patient of need for IV
- Assemble necessary equipment and supplies
- Check fluid for condition and date of expiration
- Connect proper drip set to IV bag
- Hang fluid for gravity flow and fill chamber properly
- Clear line of all air bubbles
- Select appropriate site and apply constricting band above site
- Prep site using aseptic technique with alcohol and betadine
- Open venipuncture device and inspect
- Advise patient of stick
- Apply distal traction to vein

- Enter vein at appropriate angle, obtain flashback, lower catheter and advance into vein
- Remove needle and place in sharps container
- Connect IV tubing to catheter
- Release constricting band and turn on fluid flow (may actually precede connecting the IV tubing to catheter in some individual's sequence)
- Stabilize IV site
- Monitor for infiltration/troubleshoot IV

Procedures for Training and Testing in Use of IV Fluid Replacement

Personnel must complete a training session each year with review of signs and symptoms indicating IV fluid replacement; instruction in the proper use and maintenance IV equipment, and practice with the IV training arm.

Approved by: _____ Medical Director Date: _____
Fred Reifsteck, M.D.

University of Georgia Sports Medicine
IV Fluid Treatment Record
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Name:_____ SS#:_____-___-_____ DOB: ____/____/____ Gender: ____ Date: _____
Diagnosis or Condition: _____
Allergies: _____ RX Meds: _____ OTC Meds: _____
Body Weight Prior to IV Fluid Therapy: _____ lbs.
Orthostatic Vitals (*as applicable*): Pulse: Supine: _____ Seated: _____ Standing: _____
Blood Pressure: Supine _____ Seated: _____ Standing: _____

IV Fluid Therapy:
Type of Fluid/Amt.: ( ) Normal Saline/ ____ ( ) Half Normal Saline/ ____ ( ) D5 Normal Saline_____
Flow Rate: ( ) "wide open" ( ) 500 cc/hr ( ) other: _____

IV Insertion
Angio: _____ Gauge Catheter Site: _____
Prep: ( ) Betadine ( ) Alcohol
Dressing: ( ) Op-Site IV ( ) Sterile Gauze/Tape
IVF: Time Began as Ordered: _____ A.M. _____ P.M.

Vital Signs Trending Chart						
Time	**Temp.**	**Pulse**	**B/P**	**Resp.**	**O2 Sat**	**Comments**

Discharge Summary:
Time of IV Removal: _____ A.M. P.M. Time of Discharge: _____A.M. P.M.
Catheter Intact: ( ) Yes ( ) No IV = _____ cc
Emesis: ( ) Yes: _____ cc ( ) No IV Site: Erythema: ( ) Yes ( ) No
Bleeding: ( ) Yes: _____ cc ( ) No
Bandage Applied: ( ) Sterile Gauze/Coban ( ) Band-aid ( ) Other: _____
Discharge Vital Signs: Temperature: ____ F Pulse: ____ Blood Pressure: _____ Respiration: _____
Body Weight Post IV Fluid Therapy: _____ lbs.
Oral Hydration: ( ) Rehydralyte ( ) PowerAde ( ) Water ( ) Other: ____ Amt. of Oral Hydration: _____
Patient Verbalizes Understanding of Discharge Instructions: ( ) Yes ( ) No Mode of Transportation _____

Comments:
_____
_____
_____

_____ _____
Clinician Signature Date

_____ _____
Physician Signature Date