

Using ventricular assist devices - policies and procedures



**ASSIGN
BUSTER**

Section 1 -

USING VADs

II-1 Policy (Section 1) -

A. Excepting emergencies, newly placed external or implanted vascular access devices, placement must be confirmed by x-ray prior to infusing any medications or solutions. Note: lines inserted into the femoral vein do not require chest x-ray.

B. Administration sets connected to a VAD must be cleaned and prepped using alcohol anywhere along the administration set where entry is made, using a friction scrub for 15 seconds.

If the patient displays symptoms of infection: (i. e. febrile, chilling, or has drainage from the VAD exit site), blood and/or site cultures need to be obtained. A physician order is required.

C. Emergency care of the VAD includes all of the following:

1. Notify the physician immediately to obtain order(s) if a VAD is cracked, leaking, or has a hole. Clamp the VAD between the site of the defect and the exit site. Clamping must be done atraumatically either with a plastic clamp or with a metal clamp padded with gauze.
2. If the VAD Dacron cuff protrudes from the exit site, secure the VAD with tape and notify the physician.

3. If symptoms of VAD infiltration occur (i. e. edema of the neck, chest, back or abdomen, or shortness of breath), stop the infusion and call the physician immediately.

D. For patients who are being treated with antibiotics for sepsis or r/o sepsis, antibiotics ought to be rotated to each lumen of a multi-lumen VAD at least every 24 hours, if possible, i. e. it is optimal to rotate each antibiotic dose, or minimally every 24 hours, until blood cultures are negative for 72 hours.

(See Reference Below to II-1-D)

E. All central venous access devices which are Present on Admission (POA) or inserted with the intent of the patient being discharged with the device, e. g., hemodialysis, chemotherapy, long term antibiotic therapy, etc. do not require daily validation of medical necessity, but should be inspected for signs and symptoms of infection.

All other Central venous devices shall be evaluated for medical necessity on a daily basis.

Section 2 -

OBTAINING SPECIMENS FROM VADs

II - 2 POLICY - (Section 2) - Medical Center

A. Aseptic technique is to be used when obtaining laboratory specimens from any type of Vascular Access Devices (VAD).

B. Drawing blood from a VAD is performed only by a licensed healthcare professional within their scope of practice using needle-free devices when obtaining or transferring specimens.

C. Specimens must be labeled in the presence of the patient and must include patient name, medical record number, date of birth, visit number (for Medical Center only), and date and time of specimen collection. Write the first initial and last name of the person who collected the specimen on the label.

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D. Labs requiring a blue top anticoagulant tube (such as PT/PTT/INR or other clotting studies) should be drawn peripherally. In those instances in which these studies must be drawn through the VAD, this specimen should be the last specimen drawn.

E. Syringes less than 10 ml are not to be used when flushing a VAD in order to avoid causing excessive pressure or fracture to the VAD.

F. When drawing from a child less than two years of age, a stopcock is used to maintain a closed system and the discard blood is returned to the child within 60 seconds.

G. To prevent over-heparinizing a pediatric patient, no more than 50units/kg should be given within a four-hour interval. If flushing does exceed this amount, an MD order should be obtained and individualized for that patient.

H. For multi-lumen VADs: When drawing labs from one lumen, clamp other lumen(s) for duration of the blood draw, even if other lumen(s) is heparin locked. This prevents blood from possibly being introduced into second lumen when heparin locked. It also prevents possible contamination of lab specimen if fluid is infusing in second lumen.

I. Heparin for routine VAD flushes requires an order in both inpatient and outpatient settings. The dosing and frequency guidelines are found on Attachment C of this policy.

III - 2 PROCEDURE - (Section 2) - RESPONSIBLE

PERSON(S)/DEPT.

PROCEDURE

Independent Practitioner: MD, PA, NP

A. Order labs to be obtained, including frequency

1. Inpatient:

Unit Clerk

a. Transcribe order to the KARDEX lab log

2. Outpatient Adult:

ACA/RN

a. Notify the RN when patient arrives in ambulatory care.

Lab Drawing Area Staff

b. Process patients as they check for their lab-draw appointment.

3. Outpatient Pediatrics:

ACA/RN

Notify the RN when patient arrives at the pediatric's clinic for their lab-ordered appointment.

RN

B. Gather supplies including:

1. Non-sterile gloves
2. Alcohol wipes
3. Povidone wipes when drawing blood cultures
4. Leur-Lok access device vacutainer
5. Syringes containing appropriate amounts of saline flush and heparin flush (see Attachment C)
6. Appropriate sized red top tube for discard
7. Appropriate lab tubes for specimens (refer to Alphabetic test list with requirements on Division of Pathology lab service information website).
8. Laboratory labels and requisitions

C. Procedure:

1. Process:

a. Wash hands

b. Verify patient information on all requisitions and labels

RESPONSIBLE

PROCEDURE

PERSON(S)/DEPT.

against patient armband

c. Place supplies and collection tubes within easy reach

RN

d. If IV is running, stop IV flow and clamp catheter

e. Don gloves

RN

f. Disconnect IV tubing, if attached and cap the IV tubing. Clean area around top of catheter cap thoroughly with alcohol wipe using friction scrub for 15 seconds

2. For blood cultures:

a. Clean catheter cap thoroughly with povidone

wipe and wait 60 seconds.

b. Clean top of blood culture bottle with alcohol wipe before placing specimen into a culture bottle.

3. For PICC lines:

a. Flush with 10ml saline and withdraw waste into syringe pausing after 0.5ml of discard has filled syringe. Continue slow withdraw to desired waste (see Attachment C).

b. Attach vacutainer to catheter injection cap.

Unclamp catheter. Attach discard tube to withdraw discard blood.(except PICC). If attempt to draw with vacutainer is unsuccessful, attempt withdrawal with 10ml syringe:

(1) If experiencing difficulty obtaining blood sample, ask patient to take a deep breath, raise one or both arms overhead, cough, or turn head. Changing patient's position may also help.

(2) If still unable to draw, refer to policy Attachment B: " Guidelines for Troubleshooting Vascular Access Devices" and notify MD as appropriate. Reference catheter occlusion

decision tree (Attachment B).

(3) Remove discard tube. Blood discards are NOT to be used for any specimen sample.

c. Obtain necessary blood specimens:

(4) If specimens obtained via syringe, transfer blood into appropriate specimen tubes/bottles using the appropriate blood transfer device.

(5) Remove vacutainer.

(6) Clean hub of catheter cap with an alcohol wipe using friction scrub for 15 seconds.

(7) Flush with syringe containing appropriate saline flush using push-pause method. (see attachment C).

(8) Remove syringe while maintaining forward pressure. Do not bottom out syringe.

(9) Clean hub of catheter cap with an alcohol wipe using friction scrub for 15 seconds.

(10) Flush with syringe containing appropriate heparin flush if IV fluids are not running (see

attachment C).

(11) Remove syringe while maintaining forward pressure. Do not bottom out syringe.

RESPONSIBLE

PROCEDURE

PERSON(S)/DEPT.

(12) Wipe catheter injection cap thoroughly with alcohol wipe.

RN

(13) For patients with running IV flow, disconnect tubing, flush, reconnect tubing, and initiate IV flow.

(14) Tape should not be placed at injection cap/tubing connection. If tape is desired for anchoring catheter to clothing, place tabbed tape several inches up line from cap connection.

(15) Remove gloves and dispose of equipment and biohazards properly.

(16) Wash hands.

(17) Before leaving patient, verify all tubes, labels and requisitions are accurate and send to laboratory.

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II-4 POLICY - (Section 4) -

A. An RN who has demonstrated competency in this procedure may perform needle insertion, site care, and needle removal of an implanted Vascular Access Device.

B. The surgeon will access the port in the operating room on newly placed ports.

C. Sterile technique must be utilized when accessing the implanted VAD.

D. Only a 90-degree safety non-coring needle is used to access implanted VADs. Needles are changed every seven days. The recommended non-coring needle sizes for both adult and pediatric patients is 19-22 gauge, 3/4" - 1". Blood or more viscous solutions require a lower gauge needle. Needle length is dependent upon the amount of subcutaneous tissue and depth of port. Do not access port if area is blistered or there are signs/symptoms of infection.

E. Post-op dressings can be removed 24 hours post-op (unless ordered otherwise by physician). Steri-strips at insertion site should remain in place for 7-10 days.

F. Implanted VAD site dressing changes are to be done once a week, with the needle change, or whenever it becomes loose, wet, or soiled.

G. A heparin-locked non-coring needle may remain inserted for seven days for intermittent IV infusions. If a non-coring needle was placed and the <https://assignbuster.com/using-ventricular-assist-devices-policies-and-procedures/>

patient does not require therapy, the needle must be removed by an RN prior to the patient being discharged home.

H. Topical anesthetics may be used to help minimize the pain of needle insertion.