

Collection of Venous Blood from Renal Patients

Key Points

- To ensure that the collection of blood samples for pathology investigations is correctly, competently and safely performed.
- All staff trained to Trust standards in venesection techniques.
- Avoid blood sampling if patient is due for dialysis unless time critical.
- Avoid taking blood samples from arteriovenous fistula (AVF) or arteriovenous graft (AVG) arm or protected arm for possible AVF surgery.

Version: 2
Date Issued: 28/06/2024
Review Date: 20/06/2027
Key words: Venous blood collection, venous blood renal, Haz-tabs

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Abbreviations

AVF	Arteriovenous fistula
AVG	Arteriovenous graft
COSHH	Control Of Substances Hazardous to Health

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Introduction:

Renal patients are likely to need an operation to create a fistula for dialysis which uses veins in the forearms and upper arms. This provides vital access for haemodialysis. The surgeons rely on having good quality veins for the fistula to form. Repeated venepuncture can damage the veins and make them un-usable for the dialysis access operation.

For this reason, blood samples are required to be taken from the back of the hand in Renal patients. It will often be necessary to use a butterfly needle for this. Patients approaching the need for dialysis will often, but not always, have a wristband that says blood should not be taken from a particular arm. If after 2 attempts, it has not been possible to obtain a blood sample from the back of the hand, please check with the nurse in charge or the doctor, to see whether it is clinically acceptable to take blood from the forearm or upper arm.

Please do not take blood from the arm where there is a fistula. If a patient has a fistula in both arms, please discuss this with the attending medical officer.

To ensure that the collection of blood samples for pathology investigations is correctly, competently and safely performed.

All staff trained to Trust standards in venesection techniques.

The procedure is the responsibility of the phlebotomy and clinical team in Renal Department and Renal Wards.

Health and Safety

For general procedures: For general safety procedures see FHFT Health and Safety policy and Renal Unit specific risk assessments that are in the ward office.

COSHH Reference: Refer to relevant laboratory COSHH attached and located in the Pathology General Office and G8 – Renal unit.

COSHH Reference:

Refer to COSHH assessment on Haz-tabs

Refer to COSHH assessment on Alcohol

Collection of venous samples:

Equipment

Suitable phlebotomy area/space

Vacutainer system holders, needles (butterfly) and bottles

Alcohol gel

Gloves (latex free)

Non allergic tape

Sharps bin

Tourniquet

Knowledge of samples required

Spillage kit or Haz-tab solution for potential blood spills

Specimen bags

Gauze
Access to label printer

Important Warning

All staff should be aware of the potential for any specimen to contain infectious material. Therefore, every specimen should be treated with caution. Leaking samples should not be transported but brought to the attention of the appropriate staff for immediate attention. It is important that the Pathology **Central Services Manager** be informed.

Staff should be immunised against Hepatitis B and all vaccinations should be kept up to date. **ALL** sharps must be placed in a “sharps container” immediately. They must **NEVER** be left lying around. Sharps bins must be closed whenever unattended. Bins should be closed and locked when $\frac{3}{4}$ full and sent for disposal.

It is the responsibility of everyone to dispose safely of needles they have used.

Training Requirements

All staff performing venepunctures for the Pathology Department must complete the Pathology Venepuncture Training Course.

All non-pathology staff undertaking venepuncture on the Renal Unit must complete the Trust Venepuncture and Cannulation Course and be deemed as competent or, if coming from another Trust, have had a professional discussion with the clinical educator and been signed off as competent.

Procedure

Taking of blood is invasive and therefore a potentially hazardous procedure.

Although the Department of Health recommends the wearing of gloves for all invasive procedures, Phlebotomists are not trained to wear gloves unless the following circumstances arise.

Gloves MUST be worn:

- ❖ When the venepuncturist has cuts or abrasions on their hands, which cannot be covered by waterproof dressings alone
- ❖ When the patient is restless
- ❖ When the patient is known to be infected with HIV, Hepatitis, Transmissible Encephalopathies such as CJD, and other Category 3 pathogens
- ❖ All Renal Patients

Procedure for taking venous blood samples

1. Positively identify the patient
 - a. Ask the patient their full name

- b. Check their D.O.B.
 - c. Accurately identify patient using verbal confirmation and identification wrist band when collecting blood from patients on the ward. If the patient is unconscious, always confirm the patient's identity on the wrist band with the demographics on the specimen request form. (If there is a discrepancy do not proceed until you have identified the correct patient by gaining confirmation from a senior nurse)
 - d. Explain reason for procedure.
2. Blood request forms are now electronically requested by clinician.
 3. The Phlebotomist or Nurse will be able to see the requests and once blood is taken will print out the associated label, attaching it to the bottle ideally at the patient beside.
 4. Check that the patient details on the form and barcode matches the information on the patient's wrist band.
 - a. If the patient details matches correctly and the blood forms have been completed correctly. Then blood samples can be collected. (Follow Procedure below)
 - b. If there are discrepancies do not bleed patient, notify the nurse- in- charge. If the nurse in charge cannot correct the mistakes. Write on the form why you were unable to bleed the patient and leave the form on the ward, make sure you have told the Nurse in charge that you have not bled the patient and why before leaving the Ward.
 - c. Use a small amount of alcohol gel to disinfect hands before collecting samples from patients. **(Recommendations: to avoid irritation only use a small amount of gel and wash hands after 4-6 applications)**
 - d. The patient should be lying on their bed or sitting in a comfortable Chair.
 - e. The trolley should be placed next to the venepuncturists (not on the opposite side of the bed) so that the top of the trolley can be used as a work surface. The "Sharps" container should be easily accessible to prevent sharps injuries.
 - f. If the trolley cannot be easily manoeuvred closer to the patient, carry the blood collection material including the sharps bin to the patient.
 - g. Collect together the materials and bottles needed to perform the venepuncture and securely attach the needle to the vacutainer holder or syringe.
 - h. Place the tourniquet round the wrist (making sure the hand is well supported) and feel for the vein. Check both hands if in any doubt.
 - i. Tighten tourniquet to facilitate distension of the vein.
 - j. The site should be cleaned using Chloroprep, and the site be allowed to fully dry before proceeding.
 - k. Smoothly slide the needle into the vein.

Using the Vacutainer System (Holder or Butterfly)

- A. Put the first bottle into the vacutainer holder or onto the butterfly adaptor and push gently making sure the needle does not move (it should be noted that an initial bottle should be taken and discarded).
- B. When sufficient blood has been taken remove the bottle. Continue to place bottles onto the holder until you have taken all the samples required making sure the needles stay in the vein.
- C. Remove the tourniquet.
- D. Hold a dry swab gently over the puncture site and remove the needle ensuring that the safety device is enabled.
- E. Immediately dispose of the needle and holder directly into the “Sharps” bin. **Do not** remove the needle from the holder.
- F. Apply pressure to the site with the dry swab for several minutes. You may ask the patient to do this if he/she can manage this. In case of difficulty the tourniquet may be placed firmly but not tightly over the dry swab to hold it in place.
- G. Label the bottles **immediately** after collection, with the patient's full name, D.O.B. cases no. and source. There should be at least three points of identification on each sample.
- H. It is mandatory for the sampler to write the date and time the sample was collected in the box provided on the request forms.
- I. Check the patient has stopped bleeding and apply a plaster.
- J. To help avoid bruising ask the patient not to carry anything heavy or engage in strenuous exercise for a few hours. Suggest that they remove the plaster after about 30 minutes.
- K. If your hands become contaminated with blood wash them immediately.
- L. Wipe down all working surfaces at the end of a clinic.

It is the responsibility of the person taking the blood samples to label the sample correctly (at least three points of identification – in addition, Blood Transfusion samples should be initiated by the venesectionist)

- 1. If you have difficulty obtaining a blood sample or in locating a vein seek assistance.
- 2. You must have support when bleeding a very sick or difficult patient.
- 3. Do not attempt to venepuncture unless you have suitable support available.
- 4. Never attempt to bleed a patient more than twice without their permission.

5. The venepuncture has been unsuccessful after 3 attempts then the requesting medical officer should be informed and consider referring to the Vascular Access Team for assistance.
6. Do not attempt any further venepunctures.
7. If the patient has a tunnelled or non-tunnelled line, routine sampling outside of dialysis sessions is not recommended. Should there be no other choice, then this should be discussed with the Renal Consultant of the week and clearly documented that this is permissible. An aseptic technique using facemasks should be utilised.

High risk Patients

- ❖ Every patient has the potential to be considered “high risk” and all necessary precautions should be taken.
- ❖ All those patients that are known to be “high risk” have their specimens and forms marked as such with the appropriate “high risk” stickers.
- ❖ For information regarding venesection of MRSA patients refer to the Infection Control Guidelines
- ❖ Further information may be obtained from the Infection Control Team.

Urgent Requests

- ❖ If an urgent blood test has been requested on a patient, this should be collected as soon as possible.
- ❖ The sample and the request form should be returned to the laboratory as soon as possible, this can either be sent in the air tube, notifying reception that it has been sent, or delivered by hand.
- ❖ If there is no air tube available, or it is out of action, and the phlebotomist is unable to leave the ward, a porter or member of the ward staff may be asked to deliver the sample to Specimen Reception.

ACKNOWLEDGEMENT

The authors would like to thank Epsom and St.Helier Renal Unit for allowing the adaption of their protocol.

Full version control record

Version:	2
Guidelines Lead(s):	Sijo Stephen (Senior Charge Nurse)
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Library check completed:	21/09/2023
Ratified at:	Renal Clinical Governance 20/06/2024
Date Issued:	28/06/2024
Review Date:	20/06/2027
Pharmaceutical dosing advice and formulary compliance checked by:	N/A
Key words:	Venous blood collection, venous blood renal, Haz-tabs

This guideline has been registered with the Trust. However, clinical guidelines are guidelines only. The interpretation and application of clinical guidelines will remain the responsibility of the individual clinician. If in doubt, contact a senior colleague or expert. Caution is advised when using guidelines after the review date.

This guideline is for use in Frimley Health NHS Foundation Trust hospitals only. Any use outside this location will not be supported by the Trust and will be at the risk of the individual using it.

Version History

Version	Date	Guideline Lead(s)	Status	Comment
1	October 2017	Sijo Stephen	Final	Review
2	May 2024	Sijo Stephen (Senior Charge Nurse) Ana Fleet (Renal Vascular Access CNS)	Final	Review

Related Documents

Document Type	Document Name
Policy (Intranet)	Health & Safety
Assessments	COSHH General Office and G8 – Renal unit
Guideline	Management of Meticillin-Resistant Staphylococcus aureus (MRSA)