

Please attach patient sticker here or record:

Name:

NHS No:

D.O.B:

Male Female

Consultant: Ward:

Renal Biopsy under Ultrasound – CARE PATHWAY (Renal Directorate)

Introduction

A percutaneous renal biopsy is performed as a day case in most patients. Bleeding is a rare but potentially serious complication. As a result patients need to have any anticoagulation therapy reviewed and possibly stopped, and U/E's FBC, clotting screen taken, MRSA screen and urine (MSU).

Pre-biopsy (all need to be present): TABLE 1

Test	Needs to be
Blood pressure	Less than 160/90 mmHg
Hb	Above 9g/dL
Platelets	Above 150
INR	Less than 1.2
aPTT ratio	Less than 1.2
MSU	No infection
Aspirin	Stopped for 7 days
Clopidogrel	Stopped for 7 days
Dipyridamole	Stopped for 7 days
Warfarin (non-heart valve)	Stopped for 7 days
Warfarin (for heart valve)	Stopped for 7 days; admit for iv heparin when INR < 2

Any deviation from this protocol has to be clinically justified and the reason well documented in the patient's notes.

Kidney biopsy needle size: 16G Achieve Needle is standard, (14G for Trucut); 18G Achieve needle if increased bleeding risk expected (eg eGFR < 15 or acute renal failure)

The biopsy is performed on the patients bed to avoid unnecessary movement. Local anaesthetic is injected into the biopsy area.

Any bleeding is likely to occur within the first 24 hours and so could only become apparent after the patient is discharged. The patient therefore must not be discharged if they live alone or have inadequate home support circumstances. The patient must also be given and understand how to recognise any signs of post biopsy bleeding, the convalescent care required and actions to take if they feel bleeding or problems have occurred.

This Care Pathway has been developed by a multidisciplinary team. It is intended as a guide to care and treatment, and an aid to documenting patient progress. The Care Pathway document is designed to replace the conventional medical and nursing clinical record.

All healthcare professionals are of course free to exercise their own professional judgment when using this Pathway. However if the Care Pathway is varied from for any reason, the reason for variation and subsequent action taken must be documented on the multidisciplinary progress notes

Any comments regarding this Care Pathway should be sent to Dr M Ferring - WRH or Liz Wittich - WRH

If you have any problems completing the pathway please contact Liz Wittich - WRH

Abbreviations used in Care Pathway

RN	Registered Nurse	Dr	Doctor
HCA	Health Care Assistant	St N	Student Nurse
Med St	Medical Student		

Supporting Documentation

- Patient Information leaflet – Renal Kidney Biopsy under ultrasound
- eConsent

All users of this pathway must enter their specimen signature and initials below

PRINT NAME	SIGNATURE	INITIALS	DESIGNATION

ADMISSION DETAILS

SURNAME: FORENAME: PREFERRED NAME:		DATE OF BIRTH: AGE: RELIGION:	
ADDRESS: POST CODE: TELEPHONE NUMBER:		HOSPITAL NUMBER: WARD:	
		CONSULTANT: NAMED NURSE:	
DATE AND TIME OF ADMISSION:		FROM:	
DATE / TIME OF TRANSFER:		TO:	
DATE / TIME OF DISCHARGE:		TO:	
NEXT OF KIN ADDRESS: TELEPHONE NUMBER: RELATIONSHIP:		CONTACT FOR INFORMATION IF DIFFERENT: TELEPHONE NUMBER: RELATIONSHIP:	
G.P. NAME: G.P. ADDRESS TELEPHONE NUMBER:		REASON FOR ADMISSION: OPERATION DATE:	
DESCRIPTION OF VALUABLES AND WHERE STORED: DATE: SIGNED:			

NAME: **NHS NO:**..... **D.O.B:**

Pre admission preparation

No.	Desig	Preparation prior to admission	Y	N	Signature (and time where appropriate)
Pre admission	Dr and secretary	<ol style="list-style-type: none"> 1. Set indication for biopsy 2. Patient is informed verbally and agrees to procedure 3. Blood pressure is controlled 4. Secretary plans admission (ultrasound, day-case unit, patient) 5. 1 week prior to biopsy check in primary care or clinic: UE, FBC, INR, aPTT, MSU, MRSA screen (nose / groin / axilla) 6. Ensure results are available and the doctor undertaking the biopsy is aware 			

Admission

No.	Desig	Patient assessment prior to biopsy	Y	N	Signature (and time where appropriate)
1	DR / RN	<ol style="list-style-type: none"> 1. Admit patient, record history, ensure all the above in the pre admission TABLE 1 are available. Check observations, medications, allergies and consent 2. Ensure any requested anticoagulation medications have being stopped 3. Sample for U/E's, FBC, clotting screen 4. Prep-patient and insert peripheral cannula 5. Ensure results are available and the doctor undertaking the biopsy is aware 6. Patient will require a bed for a minimum of 6 hours post biopsy 7. Ensure patient had the patient information leaflet on Renal Kidney Biopsy under ultrasound and discuss the after care with them 			

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Post Biopsy

No.	Desig	Post biopsy care	Y	N	Signature (and time where appropriate)
2	Dr / RN	<ol style="list-style-type: none"> 1. Patient will have a small clear dressing over the biopsy site 2. The patient is to remain on bed rest for a minimum of 6 hours, laid supine. (any toileting must be performed using bed pans / bottles) 3. Blood pressure / pulse and biopsy site observation are to be performed every 15 minutes in the first hour, 30 minutes for the second hour, hourly thereafter. 4. All urine is to be observed for visible blood 5. All patients must pass urine before being discharged 6. Paracetamol or Cocodamol may be given as analgesia 7. Ask the renal doctor to review the patient as soon as any signs / suggestive bleeding: worsening loin pain, abdominal swelling, hypotension, tachycardia, blood stained urine, swelling over biopsy site, bladder enlargement 			

No.	Desig	Discharge care	Y	N	Signature (and time where appropriate)
3	Dr / RN	<p>Patients that live in Worcester area can be discharged after the 6 hours post biopsy time has elapsed and all observations are satisfactory. All patients living in or around Hereford and all patients undergoing a biopsy with a 14G biopsy needle are to stay overnight.</p> <ol style="list-style-type: none"> 1. Ensure the doctor performing the biopsy reviews the patient and documents they are safe to be discharged 2. Ensure the patient understands the discharge care and has a copy of the patient information leaflet 3. Patient must have escorted transport home and care / company overnight. (If this is not possible and the patient lives alone, they will require an overnight bed) 4. Patients who are discharged home but develop signs / symptoms suggestive of bleeding (worsening loin pain, abdominal swelling, hypotension, tachycardia, blood stained urine, feeling very unwell): should come urgently to A/E department Worcester Royal Hospital for further assessment 			

No.	Desig	Post-discharge	Y	N	Signature (and time where appropriate)
	Secretary and Dr.	<ol style="list-style-type: none"> 1. Secretary to produce standard discharge letter to GP (if uncomplicated biopsy) 2. Secretary to enter patient on biopsy list 3. Secretary to make follow-up clinic appointment (if not already done) 4. Secretary to chase biopsy result 5. Doctor to review biopsy result and produce treatment plan 			

Actions if patient is re admitted

No.	Desig	Criteria for haemorrhaging post renal biopsy on return to A/E	Y	N	Signature (and time where appropriate)
4	D r / R N	<ul style="list-style-type: none"> • Pain is 3 (severe) despite Cocodamol 30/500mg x 2 tablets • Visible haematuria • Palpable abdominal mass • Hb fall (pre to post-biopsy) by > 2 g/dL • Patient looks acutely ill • Current systolic BP is > 20 mmHg below BP record post biopsy – if available • BP < 100 mmHg systolic • Postural BP > 20 mmHg drop • Pulse > 100 bpm <p>Follow either intervention 5a or 5b</p>			

No.	Desig	Actions if haemodynamically stable in A/E (but there is a possibility of bleeding)	Y	N	Signature (and time where appropriate)
5a	D r / R N	<ol style="list-style-type: none"> 1. Refer to the medical team. 2. Blood transfusion should be given if blood pressure is low and / or anaemia has developed. 3. 1-2 hourly observations with PARS score calculation. 4. Bleeding after transfusion is often transient and settles spontaneously. 5. Contact nephrology consultant if required. 			

No.	Desig	Actions if haemodynamically unstable in A/E (bleeding is likely)	Y	N	Signature (and time where appropriate)
5b	D r / R N	<ol style="list-style-type: none"> 1. Move patient to the Resus room, start blood transfusion. 2. Arrange ICU review if no response to treatment. 3. Seek haematological advice regarding clotting factors and calcium if more than 8 units of blood are transfused. 4. Prolonged hypotension may result in acute on chronic renal failure, requiring dialysis. 5. The nephrology consultant who performed the biopsy (or in whose name the biopsy was performed) should be contacted via switchboard. 6. Failure to respond to above measures – consider selective renal angiography with embolisation of the bleeding vessel, or nephrectomy. 			

