



**Procedure Information Sheet -  
Percutaneous FNA / Biopsy of  
Kidney or Renal Mass**

Visit No.: Dept.:  
Name: Sex/Age:  
Doc. No.: Adm. Date:  
Attn. Dr.:

Page No:

01	02	03	04	05	06	07	08	09
+10	+20	+30	+40	+50	+60	+70	+80	+90

Patient No.: PN

*Please fill in /  
affix patient's label*

**Introduction**

1. Fine needle aspiration (FNA) or biopsy is a medical procedure performed to identify the nature of a lump or a mass or other abnormal condition in the body. The procedure can be done under X-Ray, ultrasound or CT guidance through the overlying skin (i.e. percutaneous). Small amount of tissue or fluid sample inside the lesion can be obtained by inserting a very small needle to the region of interest, so called the fine needle aspiration (FNA). Or a complete core of tissue can be obtained via a larger biopsy needle under imaging guidance, so called the core biopsy.
2. The nature of renal parenchymal disease or a renal mass may not be determined by imaging studies and other clinical investigations. Biopsy / FNA will then be required for a more definitive diagnosis.
3. The procedure will be performed by trained specialists. The procedure will generally be performed in the Department of Radiology under imaging guidance most commonly by ultrasound.

**The Operation / Procedure**

1. The procedure will be performed under local anesthesia and aseptic technique. The nurse will sterilize the field of procedure and cover it with sterilized towel.
2. FNA is usually performed via a very fine needle inserting into the lesion concerned.
3. Core biopsy is usually performed via two or more passes of biopsy needle in order to obtain adequate tissue for optimal assessment. A "click" sound will be encountered due to movement of needle parts during the biopsy procedure.
4. Duration of the procedure varies, depending on the complexity of the condition. It may take only 30 minutes though you may need to stay in the Department of Radiology for over an hour altogether.
5. Before, during and after the procedure, patient's vital signs (like blood pressure and pulse rate) will be monitored.
6. Specimen will be sent to pathological laboratory for examination which may take a few days to complete.

**Before the Operation / Procedure**

1. A written consent is required.
2. Inform medical staff before the examination if patient thinks she is pregnant.
3. Inform medical staff if patient has any allergies to food, drug, local anesthesia or contrast media. Oral or intravenous steroid premedication may be needed before injection of contrast medium.
4. Inform medical staff if patient is on anticoagulant or antiplatelet drugs. Withhold the medication as doctor prescribed.
5. Check clotting profile for any bleeding tendency, to be corrected if abnormality detected.
6. Fast for 3 hours before examination.
7. For diabetic patients on Metformin medication, patient should inform medical staff before examination.
8. Set up venous access when necessary.



**Procedure Information Sheet -  
Percutaneous FNA Biopsy of  
Kidney or Renal Mass**

Visit No.: Dept.:  
Name: Sex/Age:  
Doc. No.: Adm. Date:  
Attn. Dr.:

Page No:

01	02	03	04	05	06	07	08	09
+10	+20	+30	+40	+50	+60	+70	+80	+90

Patient No.: PN

*Please fill in /  
affix patient's label*

**Risk and Complication**

1. Patient may pass bloody urine after the procedure (common).
2. A blood clot may accumulate around the biopsy site. Rarely, less than 3% blood transfusion or trans-arterial blockage of bleeding vessel is necessary if the bleeding continues.
3. Death from bleeding is extremely rare.
4. Risk of infection or organ injury requiring surgery is rare.
5. Injury to adjacent organs like liver, pancreas, colon or lung is rare.
6. Unfortunately, not all biopsies / FNAs are successful. They are subjected to sampling error, or rarely the abnormal tissue obtained is not adequate for diagnosis. In such circumstances, the biopsy / FNA may have to be repeated on another day.
7. Despite these potential complications, percutaneous biopsy / FNA is normally very safe and is designed to save patient from having a major procedure. A positive diagnosis can help you to get the appropriate treatment.
8. Common complications are generally minor and severe complications do not happen very often.
9. Allergic reaction to intravenous contrast medium.

**General Risks**

**4.1 Mild reactions**

For example, itching, mild skin rash, nausea, vomiting, feeling of warmth, arm pain, sneezing, coughing, and chest tightness. A few patients may experience delayed reactions usually within 24 hours, which include pain at injection site, itching, rash, painful or swollen salivary glands. The symptoms are usually transient, requiring minimal or no treatment.

**4.2 Moderate reactions**

These symptoms are more severe and last for longer duration. Patient may also experience rash or urticaria, fever and chills, an increase or decrease in blood pressure and palpitation. Specific treatment and close monitoring are required.

**4.3 Severe reactions**

The symptoms include shortness of breath, irregular heartbeat, chest pain, severe kidney failure, convulsion and unconsciousness. If these symptoms occur, the patient will require urgent medical treatment.

Should a complication occur, another life-saving procedure or treatment may be required immediately.



**Procedure Information Sheet -  
Percutaneous FNA / Biopsy of  
Kidney or Renal Mass**

Visit No.: Dept.:  
Name: Sex/Age:  
Doc. No.: Adm. Date:  
Attn. Dr.:

Page No:

01	02	03	04	05	06	07	08	09
+10	+20	+30	+40	+50	+60	+70	+80	+90

Patient No.: PN

*Please fill in /  
affix patient's label*

**Disclaimer**

This leaflet only provides general information pertaining to this operation / procedure. While common risks and complications are described, the list is not exhaustive, and the degree of risk could also vary between patients. Please contact your doctor for detailed information and specific enquiry.

**Reference**

1. The Hong Kong Society of Interventional Radiology Limited, Patient Information Leaflet: Percutaneous FNA (Fine Needle Aspiration) of Renal Mass / Biopsy of Kidney (2010)
2. Smart Patient Website by Hospital Authority: Renal Biopsy (2008)

-----

I acknowledge that I have understood the above information and was given opportunity to ask questions concerning my procedure.

\_\_\_\_\_  
Name of Patient / Relative

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Relationship (If any)

\_\_\_\_\_  
Date