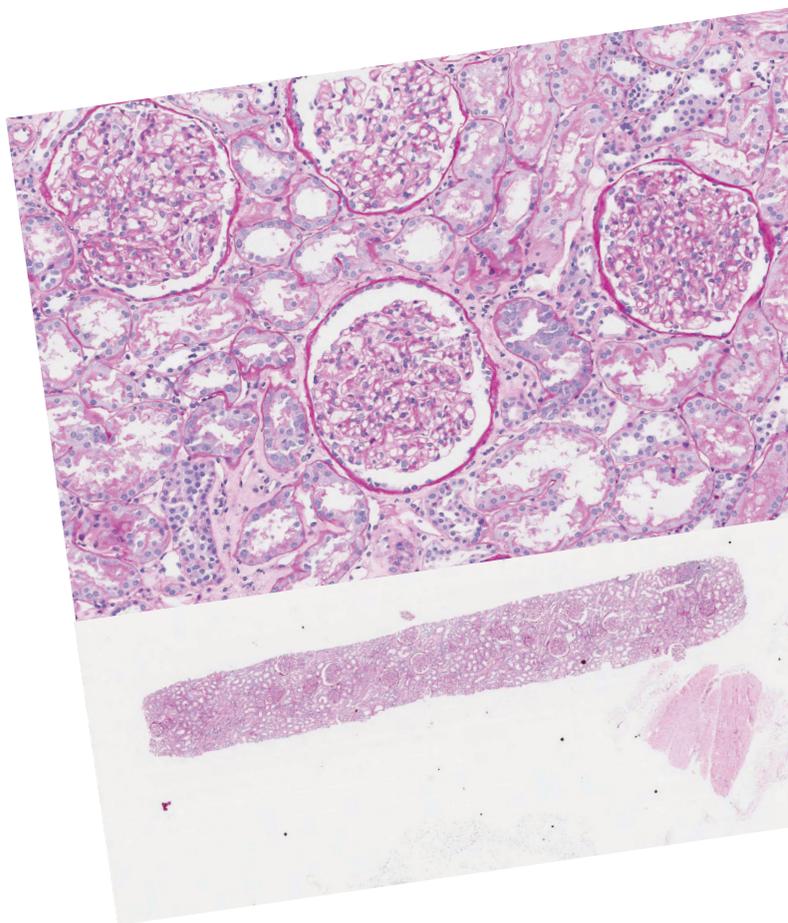


# Kidney Biopsy



The Renal Medicine Service offers screening to help patients detect kidney problems early. Our team of specially-trained clinical coordinators, nurses, educator/counselors, dietitians, medical social workers and specialist doctors offer one-stop, seamless and coordinated care to manage a patient's well-being. We offer personalised clinical care, education and counseling to stop kidney diseases from progressing/ complications from worsening, and treat various kidney inflammatory conditions, such as glomerulonephritis and tubulo-interstitial nephritides and kidney problems associated with familial, urological, rheumatological, various cancers and multi-system conditions.

## What is a kidney biopsy?

Kidney biopsy is a procedure that involves the brief insertion of a short spring-loaded needle into the kidney to obtain a sample for analysis.

Kidney biopsy is useful in investigating the causes and treatment options for different kidney conditions.

## When will I require a kidney biopsy?

A kidney biopsy is advised when:

- There is a significant amount of protein in your urine
- You have been diagnosed a kidney condition that requires specific medication/treatment
- The severity of your condition or the response you make to the treatment of an existing kidney condition needs to be assessed
- Your kidney function is rapidly declining

## Admission

Upon admission, our nurse will orientate you with the facilities in the ward. Your temperature, pulse and blood pressure will be taken. A fine plastic tube will be inserted into your vein for injections. If required, blood samples will be taken and you will be asked to pass urine before the procedure.

A doctor will explain to you the benefits, risks and complications of a kidney biopsy. Your written consent will be taken and you will be advised to stop taking certain medications before the biopsy.



## How should I prepare?

It is important to understand why you need a kidney biopsy, its benefits and risks. Please do not hesitate to ask us questions or alert us if you have existing allergies. Please inform us if you feel unwell\* that day and comply with all advice given, especially where medications and meals are concerned.

You may take a light breakfast on the day of your procedure.

\* *Fever, difficulty passing urine/a burning sensation or blood in urine, menstruation etc*

## Before the procedure

Your name and NRIC will be checked and you will be positioned on an examination couch where your blood pressure, pulse and oxygenation will be taken.

Kidney biopsies are usually performed by a nephrologist and/or radiologist.

## During the procedure

You will be asked to lie flat on your abdomen. The doctor performing the biopsy will scan your back and encourage you to take slow, deep breaths.

The skin on your back will be cleansed with antiseptic and local anesthetic injected to minimise pain. You may feel some tingling or pushing sensation as this is done.

Hold your breath for five counts as the biopsy is taken. A 'click' sound indicates a sample has been collected. The process may repeat for two to three times.

## After the procedure

After a kidney biopsy, you may be admitted for 24 hours. This allows us to conduct further observation on you. At times, the duration of your stay may be longer if there are complications. Your blood pressure, heart rate and urine will be monitored as we examine your biopsy site, change your dressing, take blood tests and infuse intravenous fluids, etc.

You are encouraged to eat normally and drink plenty of fluids. It is normal to feel a mild pain or discomfort, but painkillers can help to control it. Rest in bed for at least for six hours after the procedure and do not strain yourself. You may resume walking the next day and be discharged when it is safe to do so. Your doctor will discuss the results with you when it is ready (usually two weeks later).

## Important points to note

- Avoid lifting heavy objects or participating in strenuous activities for at least one week after your procedure.
- Inform us if you experience severe pain in your back and/or abdomen and/or increased bleeding in your urine. You may consult a GP, polyclinic or an Emergency department if these symptoms occur outside our clinic's operating hours.



# Possible complications

- Kidney biopsy is generally safe as we take every precaution to keep it that way. Every individual is different and some form of risk is inevitable.

The following approximate but statistically-reported risks\* can help you address any concerns you have regarding a kidney biopsy:

1. Bleeding (a primary complication, 3 in 100) that sometimes require blood transfusion (1 in 100) and urgent interventions/observation in the intensive care unit.
2. Failure to obtain any appropriate kidney tissue (uncommon)
3. Injury to blood vessels and/or organs near the kidney that cause complications that require additional interventions e.g. major operation, prolonged hospitalisation etc (very rare). Surgical removal of bleeding kidney(s) and even death (very rare).
4. Severe pain (rare).
- 5 Skin infection (small risk; uncommon).

Major and minor complications are relatively low when a renal biopsy is performed using the current technique. Precautions are always taken to safeguard our patient, which include:

- controlling blood pressure before biopsy
- discontinuing certain medications if it is safe to do so
- optimising the number of certain cells in the blood and correcting bleeding disorders

\* Acknowledgements: Bleeding Complications of Native Kidney Biopsy: A Systematic Review and Meta-analysis, AJKD 2012, Kristin M Corapi et al Ms. Kimberly Oen, Yong Loo Lin School of Medicine, National University of Singapore

**Notes:**

## For more information

### Ng Teng Fong General Hospital and Jurong Community Hospital

1 Jurong East St 21, Singapore 609606

[www.ntfgh.com.sg](http://www.ntfgh.com.sg) | [www.jch.com.sg](http://www.jch.com.sg)

### Clinic opening hours

Monday – Friday: 8.30am – 5.30pm

Saturday: 8.30am – 12.30pm (Selected clinics only\*)

Dental Clinic: Monday – Thursday: 8.00am – 5.30pm, Friday: 8.00am – 5.00pm

\*Please refer to our websites for more details.

### General enquiries & appointments

General enquiries line: 6908 2222 (24-hr)

Fax: 6716 5500 | Email: [contactus@nuhs.edu.sg](mailto:contactus@nuhs.edu.sg)

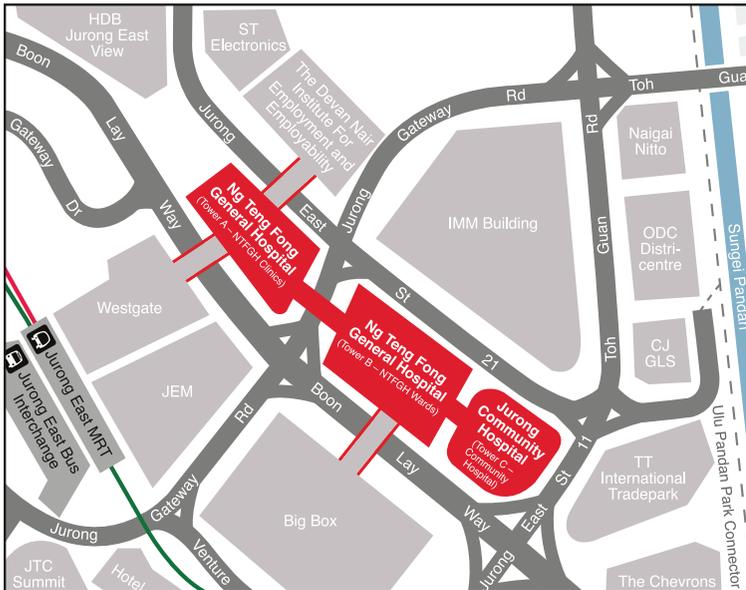
Appointment line: 6908 2222 (Monday – Friday: 8.00am – 5.30pm, Saturday: 8.00am – 12.30pm)

Fax: 6716 2200 | Email: [appointment@nuhs.edu.sg](mailto:appointment@nuhs.edu.sg)

Dental appointment line: 6716 2233 (Monday – Friday: 8.00am – 5.30pm)

Fax: 6716 2200 | Email: [JHCampus\\_Dental@nuhs.edu.sg](mailto:JHCampus_Dental@nuhs.edu.sg)

## Getting there



### By train

Alight at Jurong East MRT Station

### By bus

#### Jurong East Bus Interchange

41, 49, 51, 52, 66, 66B, 78, 78A, 79, 79A, 97, 97E, 98, 98M, 105, 143, 143M, 160, 160A, 160M, 183, 183B, 197, 333, 334, 335, 506

#### Along Boon Lay Way

49, 99, 333, Private bus service 625, 990

### Disclaimer:

The information in this brochure is meant for educational purposes and should not be used as a substitute for medical diagnosis or treatment. Please seek your doctor's advice before starting any treatment or if you have any questions related to your health, physical fitness or medical condition. Information is accurate at the time of printing.