

GFR visit - Patient letter



**The Kidney and Blood Pressure Center
Tufts Medical Center
35 Kneeland Street, 4th Floor
Boston, MA 02111
Phone: 617-636-5866**

Date: X

Dear X

You are scheduled to have your kidney function measured at the Kidney and Blood Pressure Center (KBPC) at Tufts Medical Center on X at 8:30 AM.

The KBPC is located at 35 Kneeland Street on the 4th floor. The number for the clinic is **617-636-5866**. In this letter, you will find some helpful information about your upcoming kidney function measurement.

Glomerular filtration rate, abbreviated GFR, is a measure of your kidney function. GFR is measured by injecting a very small amount of iohexol, a contrast agent also used in CT scans, and then measuring the level at approximately two and four hours after the injection using blood samples. For some people with lower levels of kidney function (i.e. higher levels of creatinine) we will also do a measurement at a later time point. The dose of this medication is much smaller than what is used for CT scans and it is a very safe procedure.

There are a few things that we should know about before you take the test. Please call the KBPC prior to your scheduled test if you have:

- Ever had any reaction to this contrast, or have an allergy to iodine or shellfish;
- You have or will receive radiological contrast in the two weeks prior to the test;
- If you are, or may be, pregnant;
- If you are taking metformin (Trade names: Glucophage, Glucophage-XR, Glucovance)

Medications:

The nurse will review with you **ALL** of your prescription medications, over-the-counter medications (OTCs), and any creams/ointments that you are currently on to determine if you can have the test. Please make sure to bring either a list of all medications or all of the medication bottles with you when you come.



Personal items to bring:

Please bring your eyeglasses/readers, hearing aids (if needed) and comfortable shoes. We want to make sure you will be as comfortable as possible. The entire visit will take **approximately 7 hours**.

Meals:

Please have a light meal the evening before and a light breakfast at home before coming for the test and also drink one to two glasses of non-alcoholic, non-caffeinated beverage before the test begins (at home or in the clinic) to avoid becoming dehydrated. You will be able to eat and drink as you normally do during the test.

If you have any questions or need additional information about your visit, transportation, or parking, please do not hesitate to **call us at 617-636-5866**.

We look forward to seeing you at your GFR measurement visit!

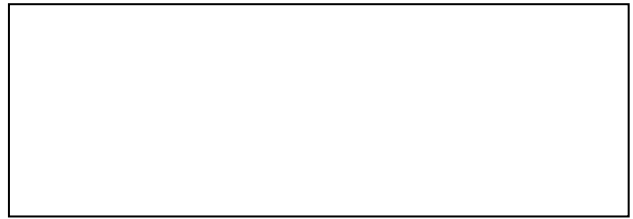
Sincerely,

The staff at the Kidney and Blood Pressure Center

Lesley Inker MD MS
Nephrologist

KBPC GFR Measurement Intake form

KBPC GFR Study Visit Form



Date: _____

Nurse/Physician Assistant: _____

MD: _____

PATIENT INFORMATION – to be filled by the Patient

Patient Name: _____

Date of Birth: ____/____/____
M M D D Y Y Y Y

Sex: Male Female

Race: White Black Asian Hispanic Other _____

1) Are you pregnant?

Yes No Do not know (Date of last period? _____) Not Applicable

Note to Nurse/PA: If pregnant, please inform the attending

2) Do you have any history of allergies (skin rash, swelling, etc.) to:

- a. Iodine (except skin reactions to betadine) Yes No
- b. Intravenous radio-contrast agents Yes No
- c. Seafood Yes No

Note to Nurse/PA: If yes to any, inform the attending but likely patient cannot have the procedure

3) Have you had a CT scan or x-ray examination during which you received contrast or “dye” within the past 2 weeks?

Yes No

4) If you are diabetic, are you currently taking METFORMIN (GLUCOPHAGE®)? Yes No

5) If yes, did you take your medication today? Yes No

Note to Nurse/PA: If yes, make sure the patient held the morning dose as instructed

6) Please list medications, including over the counter medications, with the doses that you currently take (can attach medication list)

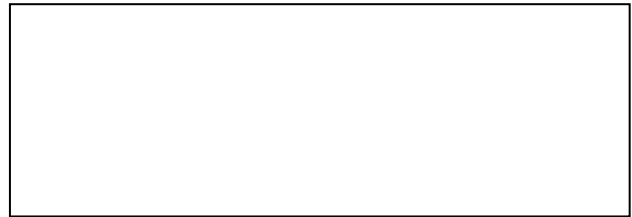
| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |



Information below to be filled by the Nurse/ Physician Assistant

| VITAL SIGNS | | |
|---|--|---|
| 1) Height: _____ . ____ cm | 2) Blood Pressure: _____ / _____ mmHg | |
| 3) Weight: _____ kg | 4) Pulse rate: _____ b/min | |
| | | |
| IV ACCESS AND BASELINE LAB DRAWS | | |
| 5) Insert one saline lock for initial blood draw and for the iohexol injection, remove it and for the remainder or testing period you will receive pokes (total of 2 or 3) via butterfly needle or Venous Access Device sticks for the timed blood draws. | | |
| 6) Draw baseline labs | | |
| Sample/Task | Actual Time (Fill in actual time sample is collected) | Processing Instructions |
| a. 2.5ml Green top heparin plasma | ____ : ____ | mix gently by inverting 5 times upon filling |
| b. 5ml Gold top SST | | |
| 7) Flush line with 10 cc of normal saline after collection | | |
| | | |
| IOHEXOL PREPARATION AND INJECTION | | |
| 8) Draw up 5ml of iohexol also called Omnipaque 300 mg Iodine/ml concentration into a 5 ml syringe. | | |
| 9) Weigh syringe with luer tip attached, <u>before</u> iohexol is administered, and record the weight to nearest tenth gram. | _____ . _____ g | |
| 10) Administer 5 ml of iohexol over a period of approximately 30 seconds. | | |
| 11) Record start time (TIME ZERO) here and in grid below (Step 14) | ____ : ____ hh:mm | |
| 12) Remove the saline lock through which the iohexol was administered. | | |
| 13) Weigh the syringe with luer tip attached <u>after</u> the iohexol was administered and record the weight to nearest tenth gram. | _____ . _____ g | |


Patient is free to eat and move around following the iohexol injection and during the study.



COLLECTION OF IOHEXOL GFR MEASUREMENT BLOOD SAMPLES – to be filled by the Nurse or Physician Assistant

Discuss with physician the timing for the final GFR sample (range from 240 minutes to 24 hours). For patients with GFR > 60, likely at 240 minutes. For patients with GFR 30-60, likely 360 minutes and for patients < 30, likely at 24 hours.

At 2 and 4 hours after the Iohexol is given, draw blood sample in 2.5 ml green top heparin plasma tube. Calculate from **TIME ZERO**, the **Expected Time** the next blood draw is due and record both the **Expected Time** and **Actual Time** the blood is drawn in the grid below and label each sample/ specimen with the **Expected Time**.

| Sample/Task | Time Point in minutes (time range) | Expected Time (Fill in expected times for the next step) | Actual Time (Fill in actual time sample is collected) | Processing Instructions |
|--|------------------------------------|---|---|---|
| 14) Time of Iohexol injection | TIME ZERO | from step 11  | ___ : ___ hh:mm | |
| 15) 120 min. blood sample (2.5 ml Green top heparin tube) | 120 (110-145 min.) | ___ : ___ | ___ : ___ hh:mm | mix gently by inverting 5 times upon filling |
| 16) 240 min. blood sample (2.5 ml Green top heparin tube) | 240 (225-260 min.) | ___ : ___ | ___ : ___ hh:mm | |
| Timing of final blood draw to be determined with MD 17) 360 min. blood sample (2.5 ml Green top heparin tube) | 360 (355min. or later) | ___ : ___ | ___ : ___ hh:mm | |

POST PROCEDURE EVENTS

- 18) Complete the Iohexol-Kidney Function lab form and send to lab with all the specimens.
- 19) Patient can be sent home if patient has seen the nephrologist who will review the GFR test and no other appointments in the hospital were arranged.