

Discharge Instructions: Partial Nephrectomy

Activities and Pain Control:

Your incision will take at least six weeks to heal, therefore you should not lift anything heavier than 10 lbs for at least 6 weeks. After this, you may gradually increase your activities over the course of another 3-4 weeks until you have reached your baseline normal routine. Initially you may require narcotic analgesics to help control the incisional pain. These medications are often constipating and therefore, I recommend that while you are taking them you should also take an over the counter stool softener (e.g., Colace). In addition to the pain medication, you should take an iron supplement for 3-4 weeks after the surgery to help your body reconstitute your red blood cells. Blood loss is an expected part of this type of surgery and iron helps the body to rebuild new red blood cells. Since the iron supplements can be constipating as well, you should continue the stool softeners until you have stopped taking both the pain medication and the iron pills.

Incision care:

Before you leave the hospital, the staples on your incision line will be removed and replaced with a special adhesive tape referred to as steri-strips. These adhesive strips should be allowed to stay on the skin for at least another week. It is best to let them fall off themselves. If you want to take a shower, you may simply cover the incision with saran wrap and tape. The incision itself can be cleaned with hydrogen peroxide for any encrusted blood, and with dilute soap and water as necessary. The steri-strips can get a little wet without falling off, however, try not to let the area get too wet, as this will loosen the adhesive and facilitate the strips coming off prematurely. The incision should be cleaned once a day and kept dry by allowing it to be open to the air. Placing too much bandages over it will let sweat accumulate. If the incision becomes warm and red and painful, a local infection may be developing and you should call the office.

Diet:

Certain dietary changes should be followed to minimize the likelihood of damage to the normal remaining kidney tissue. The most important of these is to try to avoid a high protein diet. Diets that are high in protein (i.e., meat & tofu) can result in hyperfiltration injury to the remaining kidney. If the remaining kidney has particularly poor function, then modifications in the salt and potassium intake may be required. If this is necessary, a nutritionist will provide you with information on how this is accomplished.

Precautions for the remaining normal kidney:

Since there is less normal remaining kidney tissue, there are certain precautions one should take to avoid unnecessary loss of function. These include:

- (1) High blood pressure control. The single most important cause of progression of kidney failure in patients with a single remaining kidney is uncontrolled high blood pressure. You must maintain a close relationship with your internist with frequent blood pressure checks and modification of the diet, sodium intake, and medication changes as necessary.
- (2) Diabetes control. If you have diabetes, you must maintain tight control of your glucose. Diabetes is the single most common reason for development of renal failure. Even if you are not diabetic, if diabetes runs in your family or if you are significantly overweight, you should have your blood sugars checked at least once a year by your internist.
- (3) Avoidance of drugs, which may cause kidney damage. The most common of these are certain antibiotics such as Gentamicin, vancomycin and others. In certain circumstances the use of these particular antibiotics may be life saving; however, their indiscriminant use may put you at unnecessarily high risk for kidney injury. Whenever you are receiving intravenous antibiotics, make sure you remind your physician that you only have one kidney, so that they are sure to re-assess whether this is the best antibiotic for your circumstance. Other over the counter agents which may cause kidney damage over time include NSAIDS, such as aspirin, Motrin, Orudis, Aleve, etc... The only painkiller, which is available over the counter that does not have significant kidney toxicity, is Tylenol (acetomenaphen). Finally certain over the counter medications can worsen your blood pressure control and may impact on your kidney function indirectly (e.g., Sudafed).
- (3) IV Contrast exposure. IV contrast can cause injury to the kidney when the overall kidney function is already poor. Typically, I prefer not to give IV contrast to patients with a serum creatinine of > 1.8 . If your creatinine is persistently elevated above this point and you require frequent imaging for follow-up for the primary renal mass, then an MRI with gadolineum enhancement would be preferred since the risk of renal injury from MRI contrast is insignificant. Since MRI is expensive, tedious and uncomfortable for the patient, it may be possible to alternate MRI and non-contrast CT scans for surveillance of high risk patients.

Expectations from the surgery:

Removal of kidney tissue for a renal mass requires incision through multiple muscle layers and often across certain nerves. As a result, it is not uncommon for there

to be some numbness around and frequently below the suture line. This is expected and gradually improves with time. Soreness for the incision also takes time to improve. Finally, the muscles may tend to become a little “relaxed” as their tone will no longer be as good as it was prior to cutting those muscles. This is rarely of any consequence to the patient, but occasionally there may be a noticeable “bulge” or asymmetry when looking directly into a mirror.

Follow-up:

When I accepted you as a patient, I also accepted responsibility for your continued follow-up. If you should experience a problem related to your surgery you should contact me (not your internist or family physician). I can be contacted as follows:

- (1) Office: (410) 614-6662
- (2) Clinic Desk: (410) 955-6101
- (3) Emergencies: (410) 955-6070 (this will reach the urologist on call 24hrs a day).

If you are unable to reach anyone through the numbers listed above and it is truly an emergency, my home phone number is (410) 489-5054. I only ask that you reserve my home number for true emergencies when you are unable to reach anyone through the normal routes and not for convenience.

Removal of the renal mass is just the first step in your care. Once that mass has been analyzed and staged, you must begin a lifelong process of continued follow-up and surveillance for any potential recurrence. Since the most common sites of recurrence include the other kidney and adrenal, lung, brain and bone, special emphasis is given to these areas. Every follow-up visit should consist of a CXR and certain blood tests (complete metabolic panel). This approach screens for spread to the bone or lung. Every other visit should also include a CT scan or MRI of the abdomen and pelvis, looking for local recurrence or spread to the other kidney or adrenal gland. If for any reason you develop frequent headaches or a seizure, you should undergo a brain MRI. If you should develop persistent bone pain or if the blood-work done with each visit indicates an abnormality consistent with a bone problem (e.g., elevated alkaline phosphatase or calcium) then a bone scan should also be done. The frequency of follow-up visits varies with the likelihood of recurrence and will be discussed with you prior to discharge. The primary therapy for a renal malignancy is surgery. Chemotherapy and immuno-therapy is only reserved for those patients who either have failed surgery, or for whom surgery is not possible. Thus, if a recurrence is ever found, you will be referred to a medical oncologist for evaluation for additional therapy.

Experimental Therapies:

At Johns Hopkins we are very active in trying to develop new and effective therapies for patients who have failed treatment of their renal mass by surgery alone. At any given moment we may have 2-3 experimental therapies under use in clinical

protocols and an equal number of therapies in development in laboratory settings. If you should qualify for such a protocol, you will be notified.