

RECIPIENT TESTING FOR FELINE RENAL TRANSPLANT AT THE UNIVERSITY OF WISCONSIN

Included below is a listing of tests that we require for patients prior to kidney transplantation (you may want to copy this list and take it to your veterinarian). Since many of our clients come from a great distance, our recommendation is to have your veterinarian run as many of these tests as possible. Any testing which your veterinarian cannot perform can be done at the UW School of Veterinary Medicine at your first appointment. In general, we will not repeat the tests run by your veterinarian if they were done recently (within a few weeks) other than preoperative blood work needed for anesthetic and acute postoperative management.

Once the tests are complete, have your veterinarian call us to discuss the results. These results may also be FAXED (608-265-1098) to the General Surgery Service at the UW-VMTH with the header "ATTN: Renal Transplant Candidate". We may request more testing or decide on a time frame when the surgery should be considered.

1. CBC (complete blood count) including WBC count and differential
2. Serum chemistry panel
3. Urinalysis and culture (urine obtained by cystocentesis): evaluate for specific gravity, evidence of infection, crystal type if possible, etc.
4. Feline virus testing (FeLV, FIV, FIP)
5. Cardiac evaluation (auscultation, chest radiograph and electrocardiogram; may require echocardiogram if abnormalities are detected or a murmur is present)
6. Abdominal radiographs- examine urinary tract for mineralization, stones, kidney size or other abnormalities
7. Thyroid panel- not needed in young animals
8. Blood pressure measurement (doppler ultrasound is fine)
9. Blood type- We determine recipient blood type because our donor cats (domestic short hair cats) uniformly have type A blood. If the recipient has type B or type AB blood, it is unlikely that we will be able to find a kidney donor cat for the surgery. Fortunately, these blood types are infrequently encountered in the U.S. They are seen more frequently in certain exotic purebreds. If your cat has either B or AB blood type you will have to find a donor cat for the surgery, possibly through purebred cat breeders.
10. Kidney evaluation- In general, if the kidneys are small in size, we do not require a kidney biopsy prior to transplantation because the anesthesia and biopsy procedure carry the risk of inducing enough loss in residual kidney function to precipitate a terminal uremic crisis. However, if the kidneys are normal size to enlarged (or have unidentified isolated abnormalities) on either radiographs or ultrasound, they should be biopsied since the cat may have a condition, such as renal lymphoma, which would disqualify them as a transplant candidate.
11. Dental evaluation. If your cat passes the testing regimen listed above and is a candidate for a renal transplant, then his dental health should be evaluated. If there is significant dental calculus or any signs of gum or tooth root infections, this should be taken care of prior to presentation for transplantation. Infected teeth or gums are a potential source for bacteria to enter the circulation and could infect the transplanted kidney with disastrous consequences. Teeth cleaning is well known to cause a release of bacteria into the blood stream so we would prefer that this initial teeth cleaning be done before the transplant in the presence of appropriate antibiotics. After surgery, an appropriate regimen of routine dental hygiene should be followed.
12. Blood cross-match with a donor cat. Even though cats may have the same blood type, we have found that there are recipient cats that are not compatible with a particular donor cat on a cross-match due to antibodies against the donor being present in the blood of the recipient. We have found this in cats that have not had a previous transfusion or any reason to have been exposed to a donor cat's particular antigens. Thus, a cross-match is an essential test in identifying a donor cat (blood type alone is not adequate). This test is performed after all other tests have been successfully passed. For information on how donor cats are selected, [click here](#).

After a donor has been successfully matched with the transplant candidate, the recipient will make an appointment for surgery as soon as possible. The recipient will arrive at our hospital a minimum of a few days prior to the surgery to allow appropriate preoperative preparation.