

Pre Anaesthetic Blood Testing

Before your pet has an anaesthetic we recommend that a PRE ANAESTHETIC BLOOD TEST be carried out. The test requires a small blood sample (about one ml). It is done in – house and the results can be available in less than one hour.

There are many reasons why a blood test is recommended:

- The test enables LIVER function to be tested. The liver is one of the organs that are responsible for metabolizing anaesthetic drugs. If your liver does not work properly, it may interfere with how your pet recovers from an anaesthetic. It may also influence which drugs your Vet chooses to use on your pet. Liver problems can occur as a result of infections, cancers, circulation problems, hormonal imbalances, inflammatory conditions and even congenital diseases. Young puppies may be bright and happy and very energetic, yet have been born with a birth defect. Sometimes these defects are serious and affect an animal from an early age, but other times they may be subtle and not cause problems until the puppy is an adult. Detection at an early age may mean that the problem can be rectified before your pet has any long-term health problems.
- The test enables KIDNEY function to be tested. The kidney is the other organ that is needed to filter anaesthetic drugs from the body. It is also an organ that is most sensitive to the blood pressure changes that may occur with anaesthetics and with dehydration. If we know that your pet's kidney waste product level is a little on the high side, it will allow us to take the necessary precautions to ensure that the kidneys are well protected during the anaesthetic process. It is always better to be prepared and utilize proactive health care than wait for problems to arise.
- The test checks the BLOOD GLUCOSE level. This will allow detection of sugar diabetes. In puppies, juvenile diabetes is rare, as it is in people, but can have deleterious effects if not diagnosed early on. Like young babies, puppies are not as good at controlling their blood sugar levels as adults. In most cases, a short overnight fast will not cause blood sugar problems, but in very small, young dogs it may mean that we need to supplement your puppy with intravenous glucose to ensure that blood sugar levels are adequate to allow good brain and muscle function during the anaesthetic.
- The test checks the PROTEIN levels in the blood. Protein is very important for wound healing post surgery. The protein level may also indicate serious inflammatory disease. It can also be a marker for some cancers.
- The test checks the ELECTROLYTE (sodium, potassium and chloride) LEVELS. These tissue salts are vitally important for normal muscle function (the heart being the most important of these muscles). Changes in these electrolytes may occur with tummy upsets, dehydration, hormonal abnormalities, kidney disease and many other problems.
- The test checks the quantity of RED BLOOD CELLS in the circulation. Red blood cells carry oxygen and are very important for normal organ function. This is vitally important in an anaesthetized animal. Too many red blood cells can mean dehydration or lung disease and cause the blood to be too gluggy and thick whereas too few red blood cells (anaemia) can indicate that a blood transfusion may be needed. It is also important in planning a surgery if large blood loss is expected.

What if there is an abnormality discovered?

If the blood tests show that your pet has a blood level out of the normal range, it may mean that adjustments to the anaesthetic protocol may need to be made for the safety of your pet. Occasionally, it may just mean that we have to postpone the surgery until the cause of the abnormality can be addressed.

What if nothing is wrong?

Celebrate! You have NOT wasted your money; you have been given the best news and now have a greater understanding of what is normal for your pet. In future if your pet has blood tests then we have a good base line of normal.

Does it mean that we have to do a blood test with every anaesthetic?

Animals do age at a much faster rate than humans. One year in an animals life can be as much as seven human years – imagine having a blood test at 70 years of age and then not again until 77 years of age. Imagine how many changes can occur in that time. Blood tests are very highly recommended in older animals before an anaesthetic always.

Is it expensive?

Current price (July 2011) for a pre- anaesthetic profile is \$88.15. For piece of mind and knowing that your pet's anaesthetic protocol is individualized for your pet's organ function priceless!

Please call and speak to one of the Vets or Nurses at Vet HQ if you have any concerns, queries or worries regarding your Pet's anesthetic or surgical procedure.