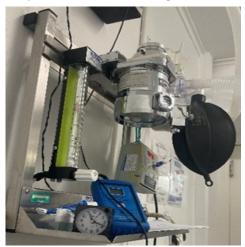


HOW DO WE MONITOR YOUR PET'S ANAESTHETIC?

We understand that putting your pet under general anaesthesia (GA) can be a daunting prospect, but it needn't be! At Dalehead Veterinary Group we take great pride in how we monitor our patients under anaesthesia to ensure your pet has a stable and safe anaesthetic. Listed below are some of the important factors and equipment that we look out for and use while your pet it is undergoing their procedure. To help us explain we have taken some pictures of a patient who is undergoing a tibial plateau levelling osteotomy (TPLO) by our orthopaedic surgeon Peter. This surgery was performed to help with a torn cruciate ligament found in their knee joint.



To the left is an image of the anaesthetic machine with an anaesthetic circuit, this is used to deliver oxygen and anaesthetic gas to the patient while undergoing their procedure. We monitor readings every few minutes so access to a clock is very important, we can then also determine at what times different events can occur during the procedure, for example a change in respiratory rate, this can be then be noted on our anaesthetic record sheet.

The anaesthetic record sheet is a very important piece of paper, it helps us recognise trends during the anaesthetic and if any interventions have helped or hindered. Every anaesthetic carried out on an animal has a record sheet. On the reverse of this sheet (not pictured) are the patient details and each medication they have received and the time given during the procedure. We also note how the animal reacts during recovery as this assists us in the future if they ever need another anaesthetic. All information is transferred to the animal's clinical history on our Practice Management System.

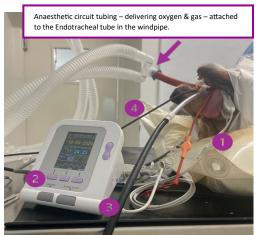
Pictured to the right below you can see that we have many devices attached to various areas monitoring different things whilst your animal is under anaesthetic.

1. This machine is a pulse oximetry reader. It helps us measure the amount of oxygen carrying haemoglobin in the blood.

The reader uses infrared light and is often attached to the tongue as this gives us the best contact and most accurate reading. Pulse oximeters can help us adjust oxygen and anaesthetic levels if a pet's oxygen saturation drops – in this case they had received a medication that can cause this reading to be low, however this does not mean that the readings are of no use.

2. The pulse oximetry machine also reads your pet's blood pressure. We know that undergoing a general anaesthetic can have some effect on the blood pressure so it is crucial that this is monitored constantly so we can recognise issues and treat them quickly. Much like when you have your blood pressure read at the doctors, this machine uses oscillometric measuring which is a method that uses a cuff which is attached to the forelimb to detect pressure variations in the arterial wall.

3. Oesophageal stethoscope – A very handy but very simple piece of equipment. This is a tube attached to earpieces which is then placed into the oesophagus (food pipe) and sits in the perfect place to help us listen to the heart rate and respiratory rate (breathing) easily.



4. Oesophageal temperature probe – This makes sure that your pet is maintaining an optimal temperature. During lengthy procedures a pet's temperature can drop easily due to being under GA and in certain position for a period of time. Using this probe is just as accurate as a rectal temperature as we often can't obtain access for this. As you can see, they are wrapped up nice and tightly to encourage them to keep warm throughout - which they did!

We hope this has given you an idea of how well your pet is looked after while having a GA procedure with us and puts your mind at ease. If you have any questions regarding anything discussed, please contact the surgery to speak to member of our Companion Animal Nursing Team.

**Consent given by the owners for the use of this photograph **

HYPOTHERMIA IN DOGS

Brrrr.. winter is setting in and the days are getting colder and with this there could be a potential danger to some breeds of dog. Hypothermia occurs in dogs when their body temperature drops below 37 degrees Celsius and small, skinny, very young, or elderly dogs are the most at risk. Whilst any breed can be affected by hypothermia, toy breeds, dogs with very short coats and dogs that live outdoors (for example working dogs) can be particularly at risk.

Hypothermia can happen anytime your dog is exposed to cold, wet or freezing temperatures. It can happen to dogs who live outdoors or do not have adequate warmth and shelter; a matted coat on a dog can allow wind and cold to get to their bare skin which can then result in hypothermia.

When going for walks on what may look like a beautiful, sunny, crisp winter's day, remember the wind chill factor, the drop in temperature when out of the sun and that severe weather can soon set so the key is to be prepared! Make sure your dog is wearing a coat (or has one packed), take some food and a towel in case they get wet. A small pot of honey and a foil blanket could be a life saver.

Our dogs can become so excitable and end up running around for hours until they almost burn themselves out, so watch out for symptoms such as excessive shivering, lethargy, shallow breathing, becoming weak suddenly, mucus membranes (gums) turning pale or blue, or extremities becoming especially cold to touch. Hypothermia, which is mild or moderate can sometimes be treated at home, but if the signs are severe then please bring them to the surgery immediately.

It is <u>very</u> important to warm the body <u>slowly</u>, if the dog can be brought indoors then wrap them in a warm blanket, if outdoors use a foil blanket or dog coat to prevent the body temperature dropping further, transfer your own body heat. At home, using a hair dryer on a low setting can be helpful, especially if the dog is wet or damp. Offering your dog something sweet like honey will help increase their blood glucose level, as this can drop during exercise. Sometimes symptoms may occur post exercise, if you have been out in the cold or wet weather make sure to dry your dog off adequately and keep them warm, avoid leaving them in the cold car whilst popping for a warm cup of tea yourself – always be aware of your dogs welfare. If you have any questions, please don't hesitate to call the surgery and speak to one of our registered vet nurses.



TIS THE SEASON.....

With Christmas just around the corner we will be indulging in our festive favourites, whether that be mince pies, Christmas cake or Yule log – it is important be to be aware of the toxic effect that these foods can have on our four-legged friends if they are not kept out of paws reach!

Raisins

Any amount of raisin should be considered toxic to dogs and cats. At this time we don't know exactly how the toxin in raisins/sultanas etc. cause an issue, but it does **not** seem to be dose-dependent – so **eating a little can be just as bad as eating a lot**. These animals will show signs of severe gastro-intestinal issues, vomiting, diarrhoea and abdominal pain. If not treated, animals can then progress to kidney failure; symptoms include drinking more than usual and further investigation would need to be carried out. The treatment, if prompt is effective, it is key that we induce the animal to vomit before any of the toxin is absorbed. In reality there is usually a time lag between the animal eating it, the owner finding it, and getting to the vets. In this case we generally will induce vomiting, but also need to institute therapy to try to flush any toxin out of the system before it causes an issue. This involves hospitalisation for 24-48 hours on intravenous fluids. As long as we are able to support the animal over this period there do not appear to be any long lasting effects.

Chocolate

Cocoa beans contain a chemical called theobromine, which is toxic to dogs! Unlike raisins we know much more about how this toxin can effect our animals. Theobromine causes an increase in the body's chemicals which cause the heart to beat faster, the main reaction that dogs have is a very rapid heart rate, excitability, vomiting and diarrhoea. The onset can also be so severe that the dog is sadly found dead.



As different chocolates have different quantities of theobromine and the severity of illness is based on amount consumed, there is a calculator we can use to have an indication of risk to any dog that has consumed chocolate. White chocolate is relatively safe, whilst cocoa powder is extremely toxic. **No amount of chocolate should ever be considered safe!** Treatment is similar to raisin ingestion, we aim to make them vomit before they absorb much of the toxin. We also give them activated charcoal which helps to bind any toxin in the gut. Then if needed in some cases we would give them fluids,

even control their heart rate and rhythm with medication. Once they have got over the initial phase there tends to be no longer term effects.

<u>Plants</u>

Mistletoe and holly are one of many seasonal favourites and whilst they may brighten up our home, these are poisonous and can make our pets poorly. Remembering to keep them out of paws reach can help keep our dogs and cats safe!







Check out our website www.daleheadvetgroup.co.uk for more information about caring for your pet, special offers, vet and staff profiles and much more!

