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## GENERAL ANAESTHESIA AND SEDATION IN 'EXOTIC' SPECIES

### What is sedation?

A sedative will allow your pet to relax and be unaware of moderate discomfort. We cannot ask our pets to stay still for a minor procedure, unlike with people. We often give sedatives to pets undergoing imaging, so they are not worried and are relaxed enough to stay in the right position, or to pets undergoing minor investigations such as examining or flushing wounds or changing a dressing.

Pets that are sedated are in a sleepy state both mentally and physically, and are unlikely to remember what has happened once they wake up.

### What is general anaesthesia?

General anaesthesia is the state where the body is completely 'asleep' and unaware of the surroundings, and unable to feel any pain or discomfort. Anaesthetic drugs are given by injection or breathed in, and they stop the brain from receiving signals from the body. Almost all surgery on pets happens under general anaesthesia, and some pets undergoing imaging or other tests will have a general anaesthetic to allow them to relax sufficiently for the procedure.

Your pet's anaesthetic will usually start with a 'pre-med'. This is an injection of drugs which is tailored to your pet, and which will help your pet to relax, and provide pain relief that will last throughout surgery and afterwards (if needed). Your pet will then be given a short-acting anaesthetic drug to allow them to go to sleep, and they will stay asleep by breathing anaesthetic gas. Many pets will have a breathing tube placed down their throat into their windpipe to deliver oxygen and the anaesthetic gas. Some pets may have a face mask rather than a breathing tube.

Pets undergoing surgical procedures will usually receive additional pain relief on top of the drugs in their pre-med. We will choose the best pain relief plan for your pet depending on their surgery.

### What are the risks of sedation and general anaesthesia?

The majority of exotic pets that are anaesthetised do not encounter any problems during or after their procedure. Rarely, a pet can have a serious or unexpected reaction to general anaesthesia, such as a drop in heart rate, a drop in blood pressure, or difficulty breathing, and sometimes this can unfortunately be fatal. The many different species we treat react in different ways to anaesthesia, and studies show that exotic species are slightly more likely to have a complication associated with anaesthesia than dogs and cats.

#### *Herbivores*

Rabbits, guinea pigs and other herbivores can become stressed and have increased adrenaline levels when away from their usual environment, and they have relatively small lungs and airways for their body size. Both of these factors mean that these patients find it harder to cope with an anaesthetic than dogs and cats, and they can react unpredictably to the anaesthetic drugs. The most common time for something to go wrong, which could lead to a pet passing away, is during the anaesthetic and in the 48 hours immediately afterwards.

The most common anaesthesia-related complication we encounter in rabbits and guinea pigs is gut stasis – this is where their digestive tract stops processing food, and it can progress to bloat if left untreated. All our patients are given medication to help prevent post-anaesthetic gut stasis, and they are fed a high calorie meal by syringe as soon as they are recovered enough to eat, as this helps their guts to start working after the anaesthetic and reduces the chance of any gut-related problems.

#### *Birds*

Parrots and other psittacine birds can be very adept at hiding signs of illness until they are very

poorly, and the birds we treat are often being anaesthetised because they are poorly, to allow us to provide treatments or to investigate an illness. This means that, just like 'exotic' mammals, birds are slightly more likely than dogs and cats to have an anaesthetic complication which could lead to death.

Due to their fast metabolism, birds need to eat frequently to maintain their blood sugar levels. As part of our post-anaesthetic monitoring we pay close attention to whether our avian patients are eating, and if they have not eaten within two hours of waking up they are given a feed to avoid them developing dangerously low blood sugar levels. One bonus of their metabolism is that birds do tend to recover and heal very quickly from anaesthesia and surgery once they are through the immediate post-operative period, usually being fully healed within a matter of days.

### Reptiles

In contrast to birds, our reptile patients can take a long time to recover from anaesthesia. They have a slow metabolism which means that it can take 24 hours or more for them to fully wake up after a procedure. For this reason, we usually suggest that tortoises and other reptiles stay with us overnight after their anaesthetic. Reptiles will not usually eat straight away, and so we do not usually offer food until the following day. Reptiles will stay in a custom vivarium where we can provide appropriate heat and light to help them have a speedy recovery.

### How do you make it safer for my pet to be anaesthetised?

All pets undergoing anaesthesia at our practice are assessed before their procedure, and sometimes we will recommend additional lab tests or treatments to ensure that your pet is well enough to undergo the anaesthetic. Our vets and nurses will discuss the specifics of the procedure with you, and the risks and benefits involved in going ahead with the anaesthetic.

The anaesthetic plan is tailored for your pet, and our fully trained staff are monitoring your pet

continuously from the moment they go to sleep to the time when they wake up. We monitor your pet's vital signs throughout the anaesthetic (which can include heart rate, breathing rate, blood pressure, gum colour, reflexes and temperature, depending on species), and record these every five minutes on an anaesthetic chart. This allows us to pick up any changes as soon as they happen and to react accordingly if there is any concern about how your pet is coping with their general anaesthetic. We continue to monitor your pet during their recovery and provide appropriate supportive care to aid a speedy recovery.

### How can I look after my pet after he/she gets home?

Your pet may be a little drowsy when he/she gets home. It's best to provide a calm, quiet space for recovery, which should be at a comfortable temperature and with the option to move away from companions if needed. For pets living outdoors, such as rabbits, it is useful to prepare a sheltered area or indoor space for a few days, especially if the weather is cold or wet. We will advise you on whether your pet needs to be kept separate from their companions – often this will not be necessary but it may be needed in certain situations. You should watch for normal eating and toileting behaviour.

Some species do have quite specific requirements for their post-anaesthetic care. Our nurses will make sure that your pet goes home with comprehensive advice on how to care for them at home.

*J Peace 2018*