



# lapis

## Anesthesia in rabbits

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# Anesthesia in rabbits

**Anesthesia is a subject that often worries many owners, but at some point or another, most rabbits will undergo an anesthetic during their life. It is important to therefore have an understanding of the subject.**

## What is anesthesia?

Anesthesia is defined as 'insensitivity to pain, especially as artificially induced by the administration of gases or the injection of drugs before surgical operations'.

A general anesthetic is when the patient is placed into a state of unconsciousness. They are not able to feel pain, are paralyzed and have no memory of what happens to them when they are under general anesthetic. This is achieved by interrupting the passage of signals along the nerves. This means that any stimulation to the body doesn't get processed or recognized by the brain. However, an anesthetic doesn't have to involve a general anesthetic. Other types of anesthetics exist, such as local anesthetics which 'numb' a specific area, but the patient is still fully conscious.

Surgical procedures, such as neutering, dentals and anything that is likely to be painful to a rabbit requires anesthesia. Sometimes it may be necessary to place the rabbit under anesthetic for procedures when the rabbit must stay still, such as CT/MRI scanning, some x-rays, and blood samples, if the rabbit is very flighty.

### Local anesthetics

These are injections, sprays or creams. They are normally used to block the sensation of pain along the nerve pathways, and can be used very successfully.

EMLA cream is often used on rabbits when placing intravenous catheters or taking blood samples and is a local anesthetic in the form of a cream that numbs the surface of the skin, meaning the rabbit is less likely to move at the crucial moment when the needle punctures through the skin. This type of anesthesia is not suitable for surgical procedures, since the rabbit is still able to move and feel sensation.

Epidurals create a nerve block, which means the patient remains conscious, but they cannot feel any sensation at the site of the epidural. This can therefore allow for surgery in a conscious rabbit.

### General anesthesia

A general anesthetic places the rabbit into an unconscious state where they are unable to move or feel pain. This is the state that animals must be under when surgical procedures are performed on them.

There are many drugs and combinations of drugs that can be given to rabbits to achieve anesthesia. The choice of anesthetic is based on many deciding factors. The age of the rabbit, health status and the procedure to be undertaken, are all considered when deciding on which anesthetic to use.

Normally a premedicant is given first; this helps to relax the muscles and has a calming effect on the rabbit, but doesn't always render them unconscious. Often, they may need other drugs or anesthetic gas to achieve general anesthesia. Rabbits are maintained under anesthesia by an anaesthetic gas delivered via an endotracheal (ET) tube placed in their trachea (windpipe) which keeps them asleep as they breathe in the gas and oxygen. The ET tube also ensures that the rabbit has a secure airway throughout anesthesia, should an emergency occur.

## Is anesthesia safe in rabbits?

Yes and no!

No anesthetic is 100% safe, 100% of the time, and no two animals ever react the same to an anesthetic, but rabbit anesthesia has become far more reliable and safer over the last decade.

Ways that risks of anesthesia are minimized include:

- Constant monitoring by trained staff when the rabbit is under anesthetic.
- Get an accurate weight of the rabbit being anesthetized.
- Ensure the rabbit is eating and drinking properly prior to anesthesia,
- Minimize stress, particularly placing them away from predators.
- Keep them warm before, during and after surgery.
- Give them medication for pain, and help keep the gastrointestinal tract moving.
- Place an endotracheal tube and intravenous catheter
- Use of familiar drugs that the veterinarian is confident using.

Lowering the risk however doesn't remove it completely, and there is always the risk that the rabbit may suffer an adverse reaction to the drugs, die under anesthetic, bleed excessively during or after surgery, or suffer complications.

Your veterinarian must point out the risks involved in an anesthetic, and for the specific procedure your rabbit is undergoing; your veterinarian should also be confident with anaesthetising rabbits and the protocol that the practice has in place.

## Should I starve my rabbit before anesthetic?

No!

Rabbits must never be starved. Unlike dogs, cats and people, rabbits cannot vomit due to a very strong cardiac sphincter (the muscle at the top of the stomach). If dogs, cats or people are anesthetized and haven't been starved, then vomiting is a serious concern. If this occurs then inhaling and choking is a potential danger, which can prove fatal. As rabbits cannot vomit, the risk does not affect them. Rabbits also need a constant throughput of food through their digestive system otherwise this can slow down which can prove fatal.

It is very important to never starve your rabbit prior to an anesthetic and, if possible, take in some of their usual food when they go to the veterinarians for an anesthetic.

## Will my rabbit need special care following an anesthetic?

Anesthesia will slow down the rabbit's gastrointestinal tract and reduce their body temperature. It is vitally important to get the rabbit eating, drinking and passing droppings and urine within 12 hours but preferable sooner. Rabbits in pain will be reluctant to eat, and therefore if anything painful has been done the rabbit must have pain relief and medication to try to ensure the digestive system doesn't slow down or stop completely.

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