



RETROBULBAR PROBLEMS IN RABBITS

Seeing your rabbit's eye suddenly protruding out further than it used to can be very confronting. Below is a discussion on what can cause this problem and what we can do about.

What is a retrobulbar problem?

A retrobulbar problem is caused by something behind the eye pushing it outwards. It can be caused by an abscess or a growth. When both eyes are affected a chest or heart condition is often suspected.

What can cause a retrobulbar abscess?

This is the most common cause of an eye protruding. In most cases it is caused by a tooth root abscess as many of the upper tooth roots sit right next to the inside of the eye. In some unusual cases it can be caused by a grass seed or similar moving behind the eye causing an infection.

How do we find the exact cause?

Often utilizing an imaging modality such as radiographs (x-rays), ultrasound, CT or MRI can help us to identify the cause. Blood testing can also help to give us more information.

How does this affect the eye?

In mild cases the eye maintains function. When the swelling becomes excessive the nerves supplying the eye can become damaged. This does not usually resolve, even when the swelling behind the eye decreases. This means the eye becomes blind and mechanisms that protect the eye do not function. This can result in the eye becoming irreparably damaged. If this occurs it is often best to have the eye removed.

How do we stop this from happening?

To prevent losing sight in the affected eye and possibly having to remove the eye we need to resolve the swelling as quickly as possible. We also need to apply lubrication to eye liberally to protect the eye from drying out.

Is this painful?

It is often assumed that this condition is painful and uncomfortable as many rabbits will stop eating and become lethargic. It is generally advisable to start pain relief medication for most cases.

What about if there is a growth behind the eye?

Growths or cancers behind the eye can be very difficult to treat. Without removing the eye itself it is nearly impossible to remove





a growth entirely, and even if the eye is removed it is common for the growths to extend into the skull. A fine needle aspirate can sometimes be taken via ultrasound which can give more information about what type of growth may be occurring.

How do we treat a retrobulbar abscess?

If the abscess is due to a tooth root infection removing the tooth involved may help to resolve the abscess. Removal of the eye and access to the tooth root via the eye socket is generally most effective, although often the socket needs to remain open and cleaned regularly till it heals completely (which can take several weeks). We can arrange hospitalization for this time if required however many patients are managed at home. Removal of the tooth via the mouth, or via a bone window below the eye have also been undertaken with varying success.

If the abscess is due to penetrating foreign body, drainage of the abscess via the mouth may help to resolve the swelling. This may be difficult as complete resolution often requires removal of the foreign body, this can be difficult to find without removal of the eye.

Do we have to undertake surgery for a retrobulbar abscess?

An alternative to surgical treatment is long term antibiotics. This can, in some cases, reduce the swelling and keep the infection at bay. A sample of the infection can be taken and sent to the laboratory to diagnose the exact bacteria involved and pinpoint the antibiotic of choice. This is not always a successful test, with only 30-40% of samples giving a worthwhile result. The choice of antibiotic is often based on ease of administration and past experience. We may need to trial a few medications before finding an antibiotic that successfully decreases the swelling.

If you have any concerns about your rabbit please don't hesitate to contact us.

