

# CORNEAL SEQUESTRUM

## What is the Cornea?

The cornea is the transparent tissue at the front of the eye, allowing light to pass into the eye. The cornea forms a barrier against debris and infection, but is only half a millimetre in thickness. The cornea is not a single solid piece of tissue, but is composed of layers with differing properties. There are three main layers, the outermost is the epithelium and is in direct contact with the tears. The middle layer forms the bulk of the cornea and is called the stroma and the very thin inner layer is called the endothelium.

## What is a corneal sequestrum?

This is a disease seen in cats which involves the development of a dark brown / black lesion within the cornea. The sequestrum is made from dead corneal tissue that has hardened. The sequestrum acts like a foreign body within the cornea and can result in significant inflammation and ulceration.

## Is my cat at particular risk?

All breeds and cross-breeds can be affected, but the disease is more common in brachycephalic (flat-faced) pure-bred breeds such as Persians and British Short Hair cats.

## Why does a corneal sequestrum develop?

The exact cause of sequestrum development has not been determined, although it is often associated with chronic corneal trauma. Herpes virus, dry-eye and entropion can predispose to sequestrum development and may need to be addressed medically or surgically.

## What are the treatment options for corneal sequestrum?

Medical management with topical lubrication can be used to improve comfort, and antibiotics can prevent infection. However, the development of a sequestrum can be painful and we normally recommend surgical removal under general anaesthesia. In most cases the corneal sequestrum is excised and a corneal graft is placed to support the cornea during healing.

## What complications could occur with corneal surgery?

There is always a degree of anaesthetic risk with any surgical procedure, and we aim to minimise these as far as possible. Infection must be avoided during the healing process and we will normally prescribe a course of topical antibiotics. Rubbing or scratching should be avoided and we will often recommend the use of an elizabethan collar to prevent suture failure.

## Can a corneal sequestrum grow back?

Although it is unlikely to grow back at the same site following removal, unfortunately new sequestrum development can occur in some cases. We usually recommend periodic ophthalmic assessment to ensure that this does not occur.

## What happens after surgery?

The cornea will need time to heal following surgery. We would expect the cornea to appear 'red' with the growth of new blood vessels. When we are happy that the corneal structure has stabilised we will prescribe medication to improve corneal transparency and reduce scar tissue formation.

