



## Equine Endoscopy



The use of endoscopy in horses is used most often to view the structures of the airway and associated structures. It can also be used to visualise the bladder and urinary tract to diagnose conditions in this region. In some cases an endoscopy can be used to picture the uterus to assist in the diagnosis of sub or infertility of a mare.

It is most commonly used to assess the nasal passage, the upper airway including the larynx, pharynx and area such as the guttural pouches. We can then pass the endoscope down into the trachea up to where it divides into the main bronchi.



### Nasal Passages

Whilst passing the camera up the nostril through the nasal passage it may be possible to detect any condition in this area. One condition that can occasionally occur in this area is an ethmoid haematoma which can cause intermittent to severe nose bleeds.

### Upper Airway

Endoscopy in this area investigates possible causes of respiratory noise during exercise. Such horses have a distinct 'roaring' sound whilst cantering. This noise caused by a condition called "**Recurrent Laryngeal Neuropathy**" where, most commonly, the left side of the larynx collapses across the opening of the trachea obstructing airflow, and thus affecting performance.

When we conduct this type of endoscopy we do not sedate the horse as your vet needs to visualise the normal movement of the larynx without it being relaxed by any sedation given. It may therefore be necessary to twitch your horse in order to safely pass the endoscope through the nostrils.



If this type of Neuropathy is diagnosed, depending on the severity and the effect on performance this condition is often rectified by a "tie back" surgery.

### Guttural Pouches

The guttural pouches are outpouchings either side of the horse's pharynx which are connected via slit like openings to the throat.



They are the most common site for horses to harbour **streptococcus equi** (strangles) bacteria. It can be so severe that frank pus (known as guttural pouch empyema) is present. Guttural pouch washes can be taken to identify these silent strangles carriers. Medication can be administered via the endoscope into infected pouches to treat the infected horses.

Guttural Pouches can be the potential site of a fungal infection which can cause severe life threatening haemorrhage, a condition known as '**guttural pouch mycosis**'.

### Trachea (Wind Pipe)

Once your vet passes the endoscope into the trachea they can look for any discharge from the lungs. There may be blood present if a horse has exercise induced pulmonary haemorrhage (EIPH), pus in horses with a respiratory infection, or excessive amounts of mucus in horses with Recurrent Airway Obstruction (RAO). A Tracheal Lavage, whereby sterile water may be flushed into the airway and then collected, brings an amount of any discharge back with it. This sample is sent to an external laboratory for testing or culturing any bacteria. The results of which should take a few days.