

Endoscopy for Small Mammal Pets (Rabbits, Guinea Pigs and Chinchillas)

What is endoscopy?

Endoscopy is the use of a special long rigid or flexible digital video camera that gives a close-up view of internal parts of the body in a non-invasive manner.

Endoscopy in small mammal pets has been a recent development, and we are excited to be at the forefront of veterinary practices offering endoscopy services for our bunny and cavy patients.

Dental Endoscopy

How is dental disease conventionally diagnosed and treated?

Dental disease is a very common problem in small mammal pets. Symptoms include drooling and reduced appetite. Diagnosis of dental disease is made from the presenting clinical signs, oral examination and x-rays.

Unfortunately, oral examination of a conscious/awake pet is very limited due to their small mouths and the presence of food and chewing movements in the mouth. This is why many small mammal-savvy veterinarians will recommend a full dental assessment under general anaesthesia (GA) if dental disease is suspected.

Under GA, veterinarians are able to visualise and assess your pet's teeth more clearly, but detail remains poor due to the small space and small teeth.

Why is dental endoscopy important?

Now, with the use of dental endoscopy, we are able to visualize magnified and detailed live video images of your pet's teeth. This ensures that no visible dental or gum disease is missed. Our veterinarian works on the teeth while viewing the images from the scope – this increases safety and accuracy during teeth trimming and extractions.

At Amber Vet, dental endoscopy is used for all small mammal dental procedures (except incisor tooth trimming).



- A. Extent of visualization of oral cavity of a rabbit with conventional dental examination under GA.



- B. With dental endoscopy, every tooth can be visualized very clearly with magnification and sharp resolution. In this image, pus can be seen oozing out from the side of the last cheek tooth deep at the back of the mouth.



- C. Dental endoscopic image of a normal row of cheek teeth

Aural (Ear) Endoscopy

How are ear problems conventionally diagnosed and treated?

Rabbits and guinea pigs with ear problems often have signs of head shaking, head tilt, scratching of ears and excessive ear discharge. Conventionally, veterinarians would diagnose ear problems based on clinical examination, ear swab cytology tests, and sometimes x-rays.

Clinical examination of small mammal ears is limited, especially in smaller-sized pets. Veterinarians usually use an otoscope to look into the ear canals – most of these scopes have to be of a certain minimum width in order for the veterinarian to look into it, but as a result, they are too wide to pass into the ear of small mammal pets less than 2kg. This makes it nearly impossible for veterinarians to assess the ear drum using conventional methods.

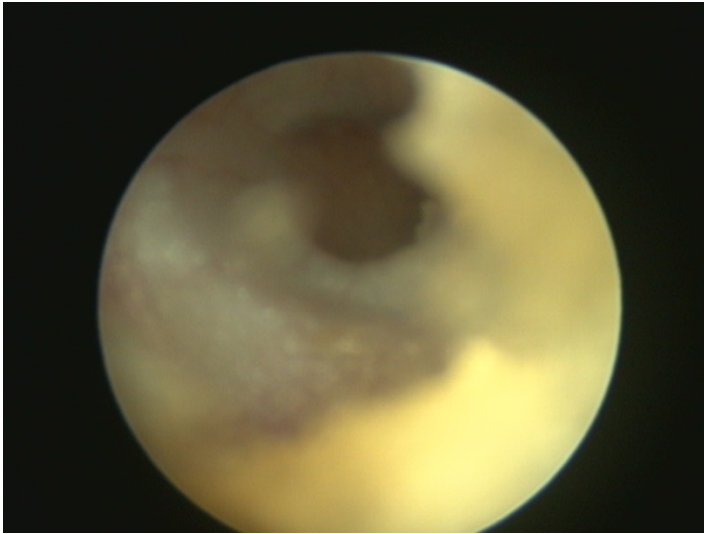
Why is aural endoscopy important?

A 2.7mm endoscope is used for aural endoscopy for both the diagnosis and treatment of ear problems. This is a very thin video camera that is able to pass all the way through the narrow ear canal. This technique gives superior information compared with other methods due to the quality and magnification of the images. We are able to visualise the ear drum, flush the ear canal, take deep ear canal swabs and deep ear canal biopsies of suspicious growths in a safe and controlled manner. This allows for a definitive diagnosis and specific treatment for a condition that is often otherwise chronic and difficult to manage.

Rabbits and guinea pigs with unexplained head tilt and suspected ear infections will benefit from aural endoscopy to thoroughly examine the ear canal and check for the patency of the ear drums and pus build-up behind the ear drums which indicate infection.



- D. Ruptured right ear drum causing head tilt in a dwarf rabbit. This would have been impossible to diagnose with a normal otoscope in a rabbit this size



- E. Patent and normal ear drum in the left ear of the same dwarf rabbit.