



### Video Otoscopy (VO)

VO uses a tiny camera system positioned in the ear to provide a high quality television image of what's happening in the external ear, the ear drum and some parts of the middle ear. The image is of a much higher quality than that seen with the naked eye using a conventional otoscope; not only does this permit an accurate diagnosis but it allows us to safely perform minor procedures including retrieval of foreign objects, removing embedded wax balls, collecting cytological samples and recovering accurate biopsy samples for histological examination. An integral irrigation / suction channel gently removes any pus or fluids from the ear before drying it. Most importantly, an early intervention using video otoscopy can often mean the difference between simple medical management and the need for salvage surgery.



### Cytology and Microbiological Isolation

Cytological evaluation of samples recovered from the external ear are performed in our own lab and can provide an important insight into the disease process in the ear. The early identification of micro-organisms including yeasts and antibiotic-resistant bacteria, means that appropriate medical therapy can be put in place without delay.



### Dermatological and Allergy Investigation

Patients with suspected allergic diseases are investigated for food allergy, insect hypersensitivity and atopic dermatitis. Less commonly, other dermatological conditions (e.g. endocrine diseases) can also be associated with ear diseases and these will be ruled out with in-house investigations or specific testing.



### Magnetic Resonance Imaging (MRI)

MRI studies provide cross-sectional images of the external, middle and inner ear as well as allowing us to visualise the region of the brain in the immediate vicinity of the ear. These help us to recognise the presence of fluid (e.g. pus, blood) or tissue (e.g. polyps, tumours) within these structures as well as highlighting inflammatory changes in the brain caused by bacterial meningitis. The more we use MRI, the more we recognise the extent of the changes that are caused by ear disease. Not only does it assist in accurate diagnoses but it is also invaluable in planning surgical interventions.

### Brainstem Auditory Evoked Response (BAER)

BAER testing measures the brainstem activity that occurs in response to clicks or certain tones. It is the only reliable method of assessing deafness, or the extent of hearing loss, and can be performed in dogs and cats after the first month of life. The test is not painful and apart from the attachment of electrodes to the skin does not require any kind of 'intervention'. The test is usually performed in the sedated patient and takes about 15 minutes.

