

## Ventral Bulla Osteotomy (VBO)

### The Procedure

This procedure is performed in animals that have middle ear disease. The ear is made up of the external ear, middle ear and inner ear. Clinical signs that indicate middle ear disease, may include a head tilt, head shaking, pain when opening the mouth (which may show as your pet being inappetent or having difficulty eating), Horner's syndrome on one side (drooping of the upper eyelid, a smaller pupil, protrusion of the third eyelid). You may be aware that your pet has had ongoing ear problems, with external ear disease being present. On occasion, there may also be signs on internal ear disease which may be indicated by problems with balance, your pet may travel in circles or fall to one side, and the eyes may move from side to side in a rhythmic way (nystagmus).



A significant number of cases that require ventral bulla osteotomy, have a polypoid growth that sits in the middle ear – this can occasionally be diagnosed when your pet has an ear examination. It may be that further imaging in the form of radiography (x-rays) or computed tomography (CT) is required before this diagnosis is made.

The bulla is a ball shaped bone that sits under the skull, which houses the middle ear. The surgery involves opening up this bony ball, to empty out the contents in the hope of curing the condition.

### Surgical Site

It is important that your pet is not allowed to access the surgical site during the phase of skin healing, to minimise complications associated with patient interference. This will mean that an Elizabethan collar may need to be worn. If your pet cannot eat or drink with the collar on, it is fine for it to be removed for this, but please replace it at all other times.

## Medication

Please follow the post operative discharge sheet that will be provided on the day of surgery. Your pet will come home with a combination of anti-inflammatories/pain killers and antibiotics.

## Post operative checks

3 days and 10 days post operatively to check the surgical site.

## Exercise

Please do not exercise your pet for 10 days after the surgery to allow healing to progress. In the case of dogs, toileting should be supervised on a lead in the garden to check all is well, but also to minimise exercise. For cats, keep them indoors until the final post operative check

Once you have had your final post operative check at 10 days, exercise can be re-introduced for dogs, if you have an outdoor cat, they can return to outdoor activity as advised by your vet.

## Post operative expectations and potential complications

The aim of the surgery is to remove the cause of the middle ear disease. The success of the surgery is in part associated with the primary cause. This will be discussed with you on the day of surgery. In general, the prognosis for resolution on middle ear infection is favourable, the resolution in cases when a polyp is present, is excellent (with a 98% success rate being reported).

If your pet has evidence of inner ear disease at the time of presentation, it is important to know that neurological signs present preoperatively are unlikely to fully resolve after surgery. It may be that there is a permanent head tilt, however many pets can have a normal level of activity despite this.

With all surgical procedures, there is the potential for complication. These would include:

- 1) Bleeding.
- 2) Recurrence of infection or neoplasia.
- 3) Inner ear damage during surgery causing neurological problems associated with balance and hearing.
- 4) Loss of hearing.
- 5) Horner's syndrome – see above in initial section as a presenting sign. This is often transient and resolves within 3-4 weeks.