Information sheet, ear surgery

The ear has three zones:

- The outer ear is the ear flap and a tunnel of cartilage and skin that leads to the ear drum. Its job is to funnel sound into the ear.
- The middle ear is beyond the ear drum and it is an air filled chamber that sits inside a thin shell of bone called the bulla. Its job is to transfer sound to the inner ear.
- The inner ear is the zone with the delicate nerves and structures that are involved with the sensations of sound and balance.

Surgery may involve:

- Removing part of the outer ear canal (lateral wall resection, vertical canal ablation). This shouldn’t affect hearing.
- Removing all of the outer ear, ear drum and part of the middle ear (total ear canal ablation and bulla osteotomy). This will reduce hearing on the operated side but won’t leave the pet stone-deaf in that ear. We do not operate on the inner ear.
- We only remove the ear flaps themselves when the disease process - almost always cancer and usually in cats – involves the flap itself so that the flap can’t be saved. So most ear surgery doesn’t much change the looks of the pet, once wounds have healed and the hair has re-grown. Sometimes the ear flaps may be a little asymmetrical after some or all of the ear canal has been removed because of removal of supporting cartilage.

Normal ear anatomy

Lateral wall resection

Vertical canal ablation

Total ear canal ablation/bulla osteotomy
Ear surgery is usually performed:
- on one or both ears when medical treatment for chronic infection has failed
- on one ear when there is a tumour present

Ear surgery has the aim(s) of:
- Removing diseased tissue
- Improving the ventilation to any remaining ear canal tissue

Lateral wall resection or vertical canal ablation improve ventilation to the remaining ear canal. Improving ventilation may help reduce future infection and should help with cleaning of the remaining outer ear canal. But some of the ear canal remains and it is important to realise that if underlying problems like skin allergies and skin disease aren’t addressed, disease can progress in the remaining tissue and so ear disease may continue post-operatively. A percentage of pets that have lateral wall resection or vertical canal ablation go on to need total ear canal ablation and bulla osteotomy later.

Total ear canal ablation and bulla osteotomy is a more aggressive procedure but is more likely to lead to a long term cure of ear disease. It is common for pets to be MUCH happier after total ear canal ablation and bulla osteotomy surgery, clear evidence of the grumbling chronic pain that these patients were in pre-operatively.

In cats the middle ear anatomy is a little more complicated than in dogs, leading to slightly different bulla osteotomy surgical technique but the principals are the same.

Complications

Infection: This can occur early in the post-operative period. The ear canal is often infected at the time of surgery, so continuing infection which can lead to wound breakdown, is not uncommon.

Long term abscessation: This usually reflects persisting deep diseased tissue and can require repeat surgery.

Nerve related complications: These are only an issue with total ear canal ablation and bulla osteotomy.

  - The facial nerve runs close to the middle ear and damage would be seen as an inability to blink on the operated side. This is uncommon and is not usually a major issue for the pet when it occurs.
        
  - The “sympathetic nerves” can be damaged, leading to Horner’s syndrome (small pupil size, prominent 3rd eyelid and droopy eyelid). This looks dramatic, but usually resolves and is of little importance to the pet.
        
  - Damage to the inner ear would be seen as balance disorders. This is a very unusual but potentially very serious.

Bleeding: There are large blood vessels in the surgical field but bleeding is not usually a major problem.

Wound breakdown: This is usually due to infection and/or interference by the pet. Elizabethan collars are almost always recommended for a week or two post-operatively to reduce self-trauma.

For further advice please contact us by phone on 07944 105501 or at mail@wm-referrals.com