Surgical management of ear disease

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Ear disease is common in our small animal patients. Whilst a number of conditions can and should be medically managed, there are some patients that will benefit from surgical intervention. Surgical diseases of the ear include those of the pinna, the external ear canal and the middle ear.

Surgical conditions of the pinna include lacerations, aural haematomas and neoplasia. For the latter, partial or total pinnectomy may be necessary to achieve appropriate tumour margins.

The external ear canal is most commonly affected by otitis externa, a condition that is best managed medically, although thorough investigations, appropriate and occasionally aggressive treatment and good client compliance are essential to achieving successful outcomes. For those cases where medical management is not possible, and in cases where the disease has caused stenosis of the entire external ear canal and progressive changes associated with the middle ear ('end-stage' ear), TECA-LBO may be a necessary salvage procedure. For cases in between, lateral wall resection or vertical canal ablation may be feasible and are a worthwhile addition to the surgical armory in appropriately selected patients.

Other conditions of the external ear that may require surgical intervention include polyps, neoplasia, trauma/avulsion and some congenital conditions. Para-aural abscessation is a condition that may develop following TECA-LBO due to incomplete removal of the bulla epithelial lining but may also develop following trauma (including bites) to the face, foreign bodies or extensive otitis externa. The condition can be challenging to manage but repeat surgery or TECA-LBO with abscess debridement is most likely to provide the best outcome.

The middle ear can be affected by extension of otitis externa or in cases of discrete otitis media/interna. In cats, inflammatory polyps of the middle ear are most commonly treated with ventral bulla osteotomy (VBO). VBO is not commonly performed in dogs but may be necessary for treatment of certain conditions (e.g. neoplasia).

Surgical decision making is key in these cases, to ensure the most appropriate surgical treatment is recommended whilst counselling clients of the potential complications. Facial nerve paralysis, retroglenoid haemorrhage and para-aural abscessation may develop following TECA-LBO, whilst Horner's syndrome and

vestibular signs may be associated with surgery of the middle ear. Despite these potential pit falls, surgical intervention for ear disease may provide patients and owners with a significantly improved long-term quality of life and should be considered.

The aim of this session is to provide practical advice to the audience on which surgery to perform and when. Cases will be used as much as possible to illustrate the concepts.

KEY LEARNING OBJECTIVES

- Surgical conditions of the ear include those of the pinna, external ear canal and middle ear
- Otitis externa is a medical disease. Total ear canal ablation/lateral bulla osteotomy (TECA-LBO) is a salvage option for the 'end-stage' ear
- Surgery for ear disease may provide excellent long-term relief in patients with chronic debilitating conditions and should be considered if appropriate

MULTIPLE CHOICE QUESTIONS

1. You are presented with a 6-year-old Cocker Spaniel with a chronic history of severe unilateral otitis externa. On examination of the affected side both the vertical and horizontal canal are stenotic and hard on palpation. What surgical procedure/s are indicated?
(A) Lateral wall resection
(B) TECA-LBO
(C) VBO
(D) Vertical canal resection
2. Which of the following complications is the LEAST LIKELY to occur during TECA-LBO?
(A) Facial nerve paralysis
(B) Pinna necrosis
(C) Retroglenoid vein haemorrhage
(D) Vestibular syndrome
3. You are presented with a 3-year-old Shar Pei that has an extremely stenotic ear canal. On further investigation you find the vertical canal is the only part of the ear affected with no disease evident in the horizontal canal or the middle ear. Which procedure would you advise to the dog's owner?
(A) Lateral wall resection
(B) TECA-LBO
(C) VBO
(D) Vertical canal resection