



vetlen

Daily Reloadable Antibiotic Delivery



CASE STUDY

Patient Signalment: 2-Year-Old Spayed Female
Domestic Short Hair

Diagnosis: Recurrent Infection of Left Ear Canal
Margins Following Total Ear Canal Ablation/Lateral
Bulla Osteotomy (TECA-BO) Surgery/TECA Revision

Surgeon: Becky Murray, DVM, DACVS
Hospital: Bridge Animal Referral Center (BARC)

HISTORY & DIAGNOSIS

Kiki was mauled as a five-week-old kitten and an emergency TECA-BO was performed at the animal shelter by a volunteer veterinarian due to trauma to the region, the left ear pinna was removed as part of this procedure.

After being adopted, Kiki was seen at a different specialty hospital in the area last year to evaluate an abscess on the left cheek. Their exam noted a small ridge of cartilage felt where the base of ear would be and soft swelling on the side of the head. Kiki would scratch the area open and it would drain occasionally. Computer tomography (CT) of the skull showed a deep encapsulated abscess lateral to the osseous bulla. The abscess communicated with the middle ear, within the bulla. Revisional TECA with lateral bulla osteotomy of the left ear was performed and vestibular signs were noted post operatively. She has had multiple courses of antibiotics, including injectable amikacin for the resistant *Pseudomonas aeruginosa*.

Since then, Kiki has had recurrent draining tracts/abscesses at her TECA-BO with multi-drug resistant bacterial on culture results. Kiki was first seen at BARC on March 18, 2025 for a CT. The CT showed a 6.8mm x 7.8mm region of rim-enhancing tissue at the base of the left ear just lateral to the tympanic bulla suggesting a region of persistent infection/inflammation, with some inflammation extending lateral to the region. No cutaneous drainage was noted at the time of CT.

A third surgery was recommended for further debridement of the region and 5 mL Vetlen Pouch placement. Since the clients had difficulty with all oral medications, an esophagostomy feeding tube was also recommended.



CT image showing 6.9mm mass effect just lateral to the bulla

SURGERY

A dorsal to ventral ellipse was performed to remove a section of the previous TECA incision as well as active 3mm draining tract. Sharp and blunt dissection was used to follow the scar tissue/inflammatory tissue deep to its attachment to the external acoustic meatus. The remaining annular cartilage/tissue was freed from the bulla with a freer elevator and sharp dissection. A lateral bulla osteotomy was performed, purulent discharge “exploded” from the bulla once entered. All diseased tissues and secretory linings were removed from within the bulla with gentle curettage. A culture of the bulla was taken at the end of the procedure post-lavage. Culture results ultimately confirmed continued *Pseudomonas* infection, sensitive to amikacin.

A 5mL Vetlen Pouch was placed superficial to the region. The pouch was very stiff and could not be folded down into the area, but seemed to sit well in the SQ space of the facial region. A single 3-0 Prolene was used to secure the distal tip of the pouch to the skin on the ventral mandibular region. Using the provided trocar, the tubing was exited out the dorsal cervical region, trimmed down to a manageable length and secured with 3-0 Prolene. The subcutaneous tissues and skin were then closed routinely superficial to the pouch.

Clients were taught to use the pouch once daily to administer 15mg/kg of amikacin diluted in 4 mL of saline. Clients found the product easy to use and Kiki tolerated the instillation process much better than previous injections or oral drug administration. The Vetlen Pouch was removed under sedation at two and a half weeks, skin incision healed routinely. The exit site was larger than typical for e-tube and it was partially apposed with suture. Client went to their primary veterinarian for suture removal and report that Kiki is in good spirits with a great appetite and no new concerns noted.



Placement of the pouch in the subcutaneous space lateral to the bulla osteotomy site.



Kiki at home, 1 week post-op.