Nasopharyngeal polyps, or inflammatory aural (ear) polyps, are benign growths originating in the middle ear and eustachian tubes of cats. Young cats are typically affected, but it has been reported in cats up to 15 yrs of age. It is the second most common nasopharyngeal disease in cats, the first being lymphoma (Tillson 2004). The cause of these polyps are still unknown, however one theory is that they result from inflammation or infection, such as an upper respiratory infection (Fossum, Tillson). The feline tympanic cavity is composed of two compartments, separated by a thin bony septum. The polyp will grow, extending to the either the external ear canal or the nasopharynx. The associated clinical signs could be upper airway, auditory or both. Upper airway signs include dysphagia (difficulty swallowing), stertorous (noise with expiration) breathing, nasal discharge, sneezing, voice change, and dyspnea. Auditory related signs are head tilt, head shaking, nystagmus, and discharge from the external ear canal.

Oral and auditory examinations require anesthesia and intubation may be difficult. A rigid stylet is used to help facilitate intubation. Diagnostic imaging such as routine radiographs can be done, but computed topography (CT) or magnetic resonance imaging (MRI) can give a better representation of the extent of the polyp: both require general anesthesia. Otoscopy is used to visualize the tympanic cavity.

Conservatively, traction avulsion (extraction of the mass) is applied and the patient is medically managed with steroids and antibiotics to treat otitis media (inflammation of the middle ear). Allis tissue forceps are used to grasp the base of the mass, then slow steady traction is applied. Hopefully the final product will be a mass with a long stalk. Otoscopic examinations are necessary to look for blood under the tympanic membrane, this should be done before and after traction avulsion. Aural polyps may be difficult to pull. The mass should be submitted for histology.

Surgery is recommended after conservative treatments have failed and with recurrence of the polyp. Traction avulsion has a 50% recurrence rate for mass extending into the external ear, and 11% for masses in the nasopharynx (Tillson 2004). Hemorrhage is rare however these patients should always have an established airway by way of an endotracheal tube. Nasopharyngeal polyps lie dorsal to the soft palate, a spay or snook hook is used to expose the polyp ventrally.

Ventral bulla osteotomy (VBO), lateral ear resection (ZEPP) and total ear canal ablations (TECA) are surgical options to remove inflammatory polyps. The VBO is the preferred surgical method to provide the best access to the bulla and a recurrence rate of 2%. For surgery, the patient is placed in dorsal recumbancy, the cervical and mandibular region is clipped and aseptically prepped. The incision is made through the skin directly over the bulla, which lies just caudal to the ramus of the mandible. When preparing the operating room a standard setup of general pack, towel, drape, suction tubing, irrigation bowl and bulb syringe and electrocautery. The additional instruments needed to perform a VBO are, self retaining retractors (i.e. Gelpi) and small tissue retractors (i.e. Senn) to help retract surrounding tissues. A freer periostial elevator is used to remove soft tissue from the bulla. A Jacobs hand chuck and steinmen pin are used to enter the bulla, followed by small rongeurs (i.e Lempert) to create a larger opening. The bony septum is perforated using the steinmen pin. Small bone curettes are used to scoop out the
abnormal tissue. A petri dish or sterile culturette for a tissue culture. Warm irrigation saline is used to flush the bulla before closure with a monofilament absorbable suture.

The complications of VBO surgery are Horner’s syndrome (third eyelid advancement) or vestibular signs; head tilt and nystagmus. Sympathetic nerve fibers run through the tympanic cavity and are often disturbed during surgical curettage. Horner’s syndrome can occur with traction alone, so the owners should be prepared for it to occur. Permanent Horner’s syndrome doesn’t seem to cause problems clinically, however otitis interna will. Some of the cats are hesitant to eat, most likely because they have poor balance. These signs are typically temporary and should resolve, if symptoms persist for > six weeks it is possible they may be permanent.

Antibiotics are based on culture results, and if indicated should be continued for 3-5 weeks.