A special advertising section

How to remove aural polyp with flexible-fiber CO_2 laser

By Boaz Man, DVM
For The Education Center

Baby Girl, a 12-year-old spayed female domestic shorthair feline, presented to our south Florida practice for chronic recurring otitis externa. Previous otic aerobic cultures were submitted and treated appropriately. The otitis would subside for a short period and then recur.

Due to the severity of the otitis externa, along with swelling and bleeding, it was difficult to fully evaluate the suspected ear polyp within the ear canal without sedation.

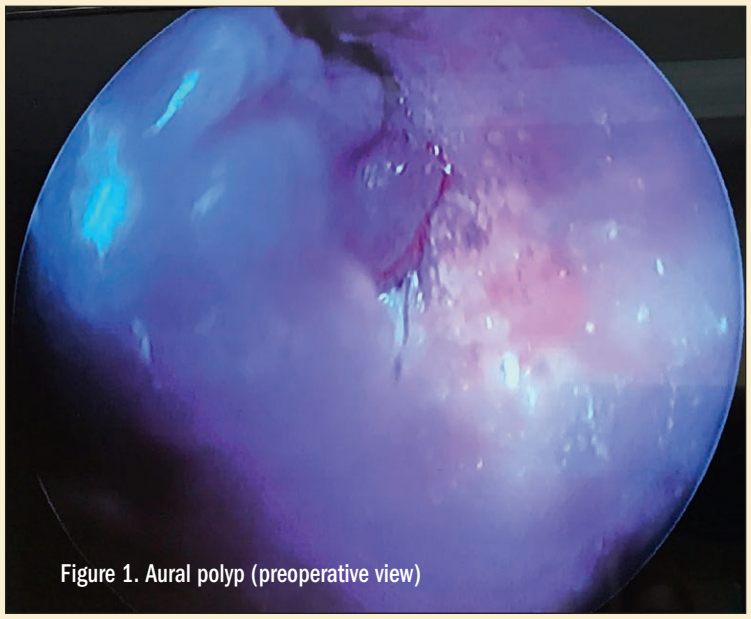

Figure 1. Aural polyp (preoperative view)

First Steps

The patient was sedated with butorphanol, propofol and isoflurane anesthesia after preoperative ECG, abdominal and chest radiographs, and CBC/Biochem/UA/T4 were found to be acceptable for anesthesia.

Video otoscopy, performed with an OtoPet MedRX unit, allowed full visualization of the ear canal and aural polyp **(Figure 1)**.

For the surgery, we used an Aesculight flexible-fiber CO_2 laser (model AE-2010). The laser was equipped with a 180-millimeter-by-0.8-millimeter metal laser tip **(Figure 2)**, which facilitated the laser ablation of the polyp. The laser was set to 8 watts, with repeat pulsing at a 20-millisecond pulse width and 20-Hz repetition rate **(Figure 3)**.

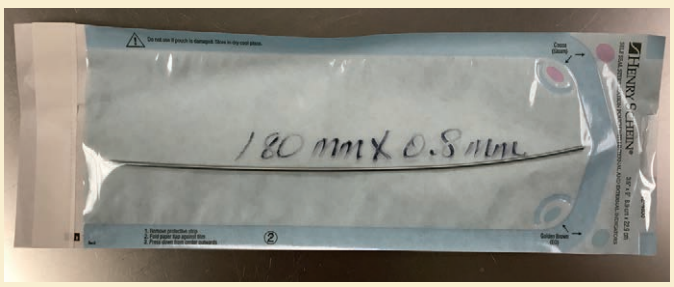

Figure 2. The metal laser tip used in the ear canal surgery

The flexible hollow fiber allowed us to easily maneuver the laser and effectively ablate only the abnormal aural polyp formation in the ear canal.

Figure 4 shows an intraoperative view of the laser polyp removal. Note the great visualization of the surgical site. The ear's high fat content typically results in the formation of heavy char, which should be removed using ear flushes or a saline-soaked swab **(Figure 5)**.

Laser Surgery Benefits

The primary benefit of the laser ablation procedure includes virtual elimination of bleeding while ensuring full visualization of the polyp and confirmation of the successful ablation.

Without laser hemostasis, the polyp vasculature would produce considerable hemorrhage.

Additionally, the ear canal's integrity is safely protected from traumatic manipulation from an otherwise blind procedure. In these cases, surgical time is reduced, which provides for an improved anesthetic experience and shorter anesthetic recovery period.

After Surgery

The pet owner declined an analysis of the suspected polyp as well as an aerobic culture. The patient was given an injection of Metacam and Convenia, and was sent home with oral Buprenex for pain control.

Postoperatively, the ear canal was treated with a 14-day time-released otic suspension of Baytril, triamcinalone and ketoconazole. The progress exam 27 days after the laser ablation of the polyp showed good healing **(Figure 6)**. ●

Dr. Boaz Man is the medical director and owner of Boca Midtowne Animal Hospital in Boca Raton, Fla. He received his DVM from Ross University in 2004 after completing his clinical training at Oklahoma State University. He has special interests in dermatology, internal medicine and surgery.

This Education Center article was underwritten by Aesculight of Woodinville, Wash., the manufacturer of the only American-made CO_2 laser.

Figure 3. Aesculight flexible-fiber CO_2 laser control panel

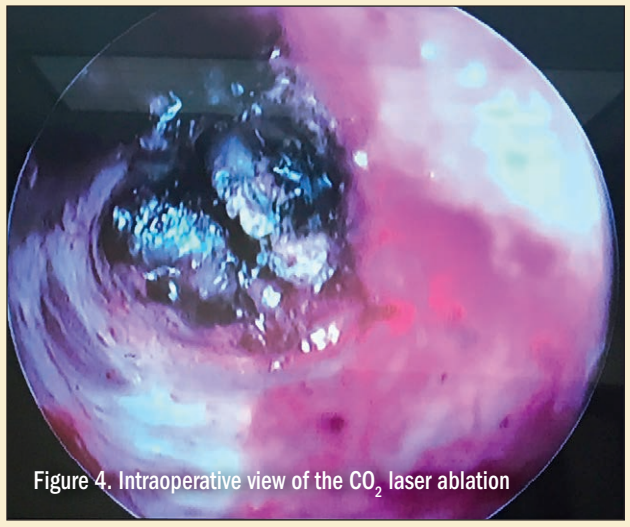

Figure 4. Intraoperative view of the CO_2 laser ablation

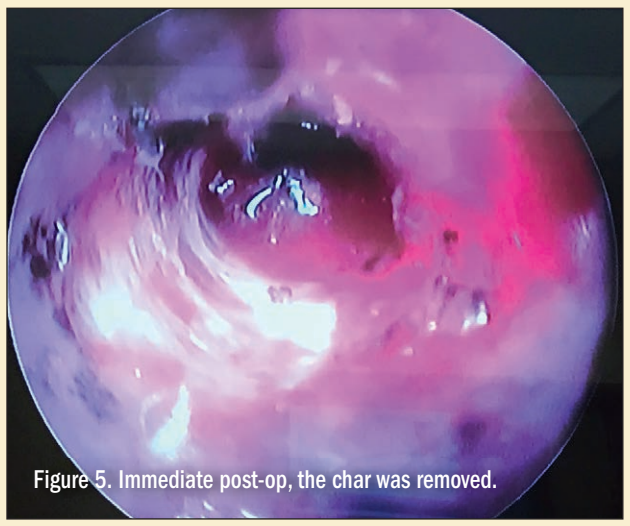

Figure 5. Immediate post-op, the char was removed.

Figure 6. A progress exam 27 days post-op showed good healing.