MICROCHIP IMPLANTATION

A PICTORIAL Photos taken by Nick Morganelli of Winston-Salem, NC

Several companies market microchips for pet identification. I use AVID microchips which stand for Animal Veterinary Identification Device. The product I use is called the AVID Friendchip. It can be used on any type of animal, including pet birds, dogs, and cats.

The AVID microchip is a professional way to identify a pet. The chip is about the size of a piece of rice and fits through a hypodermic needle. Like a vaccination, it's injected under the skin in a dog or cat but for a bird, it's inserted into the breast muscle.

If a lost pet is found and taken to a shelter or veterinary hospital, it will be checked for a microchip with a scanner. If found the AVID hotline will be called and they will check their database. Either the pet owner (if they registered their pet) or the veterinarian who originally purchased the microchip will be contacted and the lost pet returned home.

PROTOCOL FOR MICROCHIPPING BIRDS

I will microchip birds as small as a green-cheeked conure (65g). Most birds that are chipped are 200g or larger.

Some people prefer to microchip all their pet or aviary birds. However, most clients tend to only microchip birds that they have a strong emotional attachment to or that cost them a lot of money.

Fig 1: Bird sedated with isoflurane gas. Note sterilized microchip syringe on drape.

Fig 2: Microchip ready to be implanted into the bird's breast muscle.

I recommend isoflurane anesthesia for microchipping a bird. It's not absolutely necessary, but the procedure can be a painful and if bleeding occurs, it's much more difficult to stop if the bird is not sedated.

The needle that is used for implantation is large. It's either 12 or 14G in width, 1.25 inches long, and beveled at the tip to make it extremely sharp. Once the client sees the needle, they usually opt for anesthesia.

Microchips in birds are implanted in the breast muscle, in the caudal half, on the left side, about one-fourth to one-half inch deep. They are not implanted subcutaneously as in dogs or cats. Bird skin is paper thin over the breast muscle and the subcutaneous space is minuscule. If a microchip were implanted in the SQ space, it could be seen visually and would bulge upward. If it were to cause irritation, the bird could easily chew it out.

The anesthetized bird is positioned in dorsal recumbency. 70% alcohol is applied to the chest to mat and spread the feathers exposing the skin over the breast muscle. The area around the entry site is cleaned with Betadine scrub and alcohol is used as a rinse.

Before proceeding, the veterinarian should scan the microchip in the needle and syringe to confirm that it is there and that it can be read. Also make sure the scanned microchip number matches with the number on the computerized paper strip that goes in the brochure which the client takes home.

Next scan the bird to make sure there isn't already a microchip in the bird. This has happened more times than you can imagine.

Fig 3: Syringe is depressed and microchip is implanted deep into the breast muscle.

Fig 4: After implantation a gauze sponge is placed over the entry site to control any hemorrhage.

Fig 5: Entry site after implantation. No hemorrhage occurred in this patient.

The needle is inserted at a 45 degree angle dorsally and cranially to an appropriate depth, depending on the size of the bird, and then the plunger is depressed implanting the microchip.

As the needle is retracted, a gauze sponge is placed over the entry site and direct pressure applied for 30 seconds or longer to control any bleeding. If no bleeding occurs, then the hole is sealed with skin glue.

If muscle bleeding occurs and won't stop, then one, 4-0 chromic gut suture is placed through the skin and upper muscle layer to close the hole. Direct pressure is continued for up to 1 minute to prevent the development of a hematoma.

Fig 6: Bird is scanned to verify that the chip has been implanted and is readable.

Fig 7: AVID Microchip number is readable on the scanner's display.

Before recovery, the bird is scanned to verify that the chip has been implanted and can be read. I always double check to make sure the number on the scanner matches the number on the computerized strip.

The bird is monitored for at least 15 minutes for any bleeding or hematoma formation at the entry site. More direct pressure or suturing may be required if bleeding continues.

At home the owner should keep the bird confined to its cage for the next 4-6 hours to limit activity. If the bird tries to fly too soon and lands on its chest, bleeding could occur, sometimes profusely.

If bleeding occurs, the owner can use hydrogen peroxide soaked tissue to clean the area and then use direct pressure over the site for 5-10 minutes. If it won't stop, they may need to get help from a local veterinarian.