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Manual Restraint of the Avian Patient

RESTRAINT

Restraint is defined as a restriction of an animal's activity by verbal, physical, or pharmacological means so that the animal is prevented from injuring itself or others. Pharmacologic restraint is applied through sedation and/or anesthesia and is covered in Chapter 24.

Note: Restraining a bird forcibly is stressful for the bird and potentially dangerous to both the bird and the handler. Most domestically raised pet birds can be safely restrained by trained personnel with gentle handling and minimal manipulation. During all restraint, care must be taken not to restrict breathing – no pressure should be on or around the body itself, which prevents the movement of the sternum. Birds breathe essentially like a bellows system and must be able to move the body walls.

Pharmacologic agents are recommended to assist in proper restraint for (see Chapter 24)

- Procedures that are painful.
- Procedures requiring the holding of an animal in a position that may compromise respiration or where prolonged complete immobility is needed (such as for radiographs).
- With extremely frightened, aggressive, or if pain is already present.

Purposes of Restraint

- 1) To facilitate the physical examination, including oral and ophthalmic examination.
- 2) To administer medications: oral, injectable, and topical.
- 3) To apply bandages or splinting.
- 4) To perform certain procedures such as oral gavage, culturing of orifices, recording of blood pressure, electrocardiograph, and ultrasonography.
- 5) To prevent self-mutilation, such as placement of a collar.

Complications

- Stress.
- Overheating (hyperthermia).
- Dyspnea.
- Tissue trauma including muscle strain and feather damage.

Equipment Needed

- Various sizes of towels. It is recommended to avoid red-colored towels – some birds are stressed by the color.
- Various sizes of restraint straps:
- Various types and sizes of collars, including padding materials and fasteners
- Sedation/anesthesia (see Chapter 24)

Procedure

Removing the bird from a cage or carrier

Purpose

In order for a bird to be physically examined, it must be removed from the cage or carrier. It is preferable for the bird to come out on its own; however, many frightened or ill birds will not.

Technical Action

- 1) Most birds will come out of a cage on their own, either on a perch (stick) or to a hand. Small passerines are usually flighted, and so are usually caught within their cage or carrier.
- 2) Only reach into a cage to catch a bird if it will not come on its own.
- 3) Move slowly. Have an appropriately sized towel that is slowly introduced into the cage.
- 4) Allow the bird to watch and talk softly to it.
- 5) Depending on the size of the bird or if the bird latches onto the cage bars, you may slowly place the towel over the bird (on the side of the cage or the bottom of the cage).
- 6) Find the bird's head and gently use your thumb and fingers to restrain the mandible, and while moving the towel around the body, use your other hand to help secure the feet and shoulders.
- 7) Gently lift the bird out of the cage and reposition the towel. It is preferable to have the bird's head exposed.
- 8) Take care not to inhibit movement of the body wall.

Rationale/Amplification

- # Towel color may have associations for particular birds. You may want to talk to the owner about previous interactions with the veterinarian or other experiences if it involved particular colors, movements, and sounds.
- # Assoc with #4: Birds that are not used to being handled may be frightened by someone entering their cage. Dimming the lights in the exam room may help calm them. If a bird frantically starts trying to fly around the cage, back out and allow the bird to calm down. Go more slowly the next time entering the cage, and then you may need to move very swiftly to drop the towel and grasp the mandible.
- # Assoc with #5: if the bird goes to the bottom of the cage or into a cage corner, the towel can be slowly dropped over the bird, and then you can manually find the mandible for restraint.
- # If the bird is clenched to the bars and side of a cage, you may need to slowly lift the toes and get them under control with your other hand. To get the bird to let go of the cage, sometimes a few drops of sugar water dribbled on the rhinotheca so they enter the mouth will get the bird to release as it tastes the water.
- # Assoc with #8: Restraining the head and the feet; allowing the body free movement takes practice with many types of pet birds. Usually the shoulders of the bird are also restrained by the hand holding the mandible.

Procedure

Using a towel to manually restrain a bird

Purpose: Manually restrain a bird by grasping the mandible through the towel, cupping the shoulders with that hand. The towel can lightly wrap around the bird, preventing flapping and grabbing with the feet – the bird could potentially injure itself or the handler. Small birds can be restrained with one hand.

Technical Action

- 1) The bird is out of the carrier or cage.



- 2) Approach the bird slowly, talking to it.
- 3) If you are right-handed, you will want to restrain the bird's mandible and head with your left; if you are left-handed, you will use your right hand.
- 4) With the towel in the left hand, slowly surround the bird with your hand and a towel, and then slowly with the toweled hand, secure the bird's head and mandible from behind, while bringing the rest of the towel across its body with your right hand.



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- 5) Once the towel is draped around, you can lift the bird off the perch or surface.
- 6) Secure the feet – let them grasp the towel or your jacket/scrub top. Very small birds like budgies can have their feet clasped between your fourth and fifth fingers.
- 7) The bird is frequently held at an angle with the feet against your body, and the head is elevated to an easy visual position for the examination.



Rationale/Amplification

- # Following Dr. Brian Speer's approach as you drape the towel, often the wording is "Mr. Towel is going to greet you, and wants to hold you" . . . etc. Talking softly to the bird often calms it as they usually know their name. Do not show fear – be gentle, but not hesitant.
- # #5,6,7: Depending on the size of the bird and the type of examination or medication administration or other procedures, you can reposition the towel as needed and adjust the angle you are holding the bird. Be sure the bird does not overheat in the towel. If the bird struggles and vocalizes, you may need to consider the addition of some sedation to decrease the stress.

Procedure

Using a restraint strap





Various sizes of restraint straps



Purpose

With a bird in a towel restraint, the use of the strap allows the bird lay in the towel and strap, usually chewing on the towel, and frees the hands of the clinician to do the examination or procedures. Birds are usually calmer in this restraint than just manually in a towel, struggle less, and in the author's experience, are less likely to overheat. Restraint straps are usually unnecessary with small passerines such as canaries and finches. Larger passerines such as starlings and crows can be restrained, similarly to a psittacine.

The original design of the strap was done by Dr. Robert Shelley, Washington State University Class of 1980. Both authors worked with him. The straps are in four sizes made from stitched vinyl with three straps made of hook and latch fastening material. They can be washed and disinfected.

Technical Action

- 1) Lay the appropriately sized restraint strap on the exam table, with all straps laid out.



- 2) With the bird wrapped in the towel, lay the bird down on the restraint strap, positioning it so that the first horizontal straps will go approximately across the shoulders. Bring the two sides of the straps across the bird and secure them. It should be snug, but because of the towel, it is not constricting.





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- 3) The middle straps are then brought across the body and secured.
- 4) The bottom straps are then brought across – these usually are just cranial to the bird's feet, and often the feet are within the towel.





- 5) To examine different parts of the bird's body, the straps in the area are opened and the towel sections lifted.



- 6) Some birds may wiggle down and must continue to have an assistant secure their mandible from behind the head (cradle the head in the hand).
- 7) Straps often need to be adjusted.
- 8) When finished, manually secure the bird's head and usually continue to hold the bird in the towel while each set of straps is being released. The bird then is just in manual restraint with the towel for placement back in the cage, carrier, or onto a perch.



Rationale/Amplification

- # 2: many birds are not used to being held by a human and within a towel may resist the restraint. This is considered to be stressful. When the bird is quickly wrapped in a towel and laid down on the strap, and it is secured, most birds quit resisting and instead start chewing on the towel and ignoring what is going on. The bird is less likely to be injured by trying to flap its wings, and because it is laying quietly, is less likely to overheat.
- # 5: many procedures including full examinations, gavage, medication injections, and blood draws can be done with the bird in a restraint strap – simply by releasing the straps in the area needed for palpation, visualization, or manipulation.
- # 8: the authors have been using these restraint straps for over 30 years and find them invaluable, especially as it allows the nurse or clinician to safely administer medications or restrain a bird by themselves, and the bird appears much less stressed than if multiple people are involved in handling and procedures/medication administration, etc.

Procedure

Placement of an avian version of restrictive collars

Purpose

For short-term restriction of a bird's access to its shoulders, breast, and possibly other parts of the body. The classic "Elizabethan" cone-type collars face down rather than up (like in mammals). Collars can be tubular (fashioned out of lightweight materials) also called "stovepipe." No matter the type of the collar, fitting one is critical, and the bird must also have supervised adjustment to it. Many birds will become extremely stressed when a collar is placed on it and should be observed closely that it can still right itself, perch, eat, and drink. One technique is to sedate a bird, place and fit the collar, wrap the bird loosely in a towel, and place in a preferably padded cage for recovery. As the bird awakens with the collar, many will attempt to remove it at first, but gradually accept it.

There are a number of commercial collars available. In general, those designed for mammals that are clear plastic with grommets and edging are heavy on a bird, and most birds can damage them quite quickly. Many collars used to be made from old radiographic film, but now various types of plastic sheeting is available. The neck must be padded and snug, so the bird cannot get its toes up under it and get caught with the foot up against the neck. At the same time, the collar cannot be so tight as to restrict the esophagus.

Tube- or stovepipe-shaped collars keep the bird's neck extended but may not prevent the bird from getting at various body areas. These can be made from a variety of materials depending on the size and strength of the bird.

Any materials used for the collar must not be toxic as the bird is likely to chew on them.

Again, most use collars only for relatively short periods of time as for post-surgery, acute trauma, or the presence of a wound. Using a collar for a chronic condition such as feather destructive disorder is usually not a permanent part of the treatment plan.

An alternative to collars are body stockings or vests, which may work better for chronic feather disorder birds. These can be obtained commercially for many of the larger bird species and can also be made from cast stockinette, cotton tube socks, or other materials.

Technical Action

- 1) Prepare the materials to be used for making and/or fitting a collar. This often includes a tape measure, padding material such as cotton and bandage/adhesive tape, and hook and latch type fastening tape (like Velcro).
- 2) Most birds are sedated and/or anesthetized for the fitting and collar placement. Measuring the bird's neck and the length of the collar and tracing/cutting the material and attaching what type of attachments and padding can take place while the bird is sedated/anesthetized.
- 3) Monitor the bird during sedation/anesthesia as you would at any other time. This also allows any wound dressing or other treatments.
- 4) Apply the collar and adjust it so that it is snug around the neck, but not constricting the esophagus. Adjust the length – for the inverted Elizabethan type; usually it should not radially stick out much further than the sternum. If the collar is made more of a cone to cover the shoulders and restrict the wing extension, the collar usually reaches about mid-sternum. The tube/stovetype – should have a normal neck extension, but not so restrictive that the bird cannot bend to eat or drink. Tube/stovepipes may rest of the thoracic inlet/crop and may inhibit filling of the crop if too long.
- 5) When the collar is deemed to be appropriately fitted and sized, the bird is loosely wrapped in a towel and allowed to awaken. This is done best in a warmed cage/incubator that is padded, and the bird can be observed during the whole “adjustment to the collar” phase.
- 6) If it is quickly apparent, the collar is not fitting correctly (like immediately the bird gets its toes up the neck and caught), or is inhibiting postures, or if the bird is getting frantic: it is best to towel wrap the bird, administer a sedative (if one is not already on-board), and calm the bird. The collar may be able to be adjusted without full anesthesia, as it will be apparent where adjustments need to be made.
- 7) Repeat step 5. If the collar is properly seated and fitted, and the bird is just not adjusting after 2–3 hours, a different type of collar may need to be considered or an alternative plan without a collar at all made. At this point, remove the collar and allow the bird to calm itself, supplying it with food, water, and likely hospitalization overnight, (particularly if post-surgery).
- 8) If the clinician is still convinced that a collar is going to be necessary when the bird leaves the hospital, the next day another attempt can be made, possibly with a different type of collar: lighter weight, smaller overall size, etc. The procedure as above would be repeated.
- 9) If a second type of collar fails on the second day trial, an alternative to the collar must be provided. If the second type goes fine, the owner needs to be informed about how to monitor and change positions of cage furnishings, etc. This is crucial as a bird could get caught in toys, the cage, water dish, etc.

Rationale/Amplification

6,7,8: Adjustment to the collar may take time. Some birds wake up with it on and do not appear to bother it. Others will not adjust to one, no matter the type constructed. The hazards of a collar include getting a foot caught up in it, getting the beak caught in it, chewing through one leaving sharp plastic edges, strings, dangling padding material, grommets, or other fasteners semi-attached. These can all get caught in the cage and furnishings or scratch the bird or cause further injury to the bird's body as it moves. Because of this, owners of birds with collars must be educated in how to anticipate problems and be able to closely observe the bird all day – and have it be safe at night.



This is a soft collar made from soft vinyl



This collar designed by the owner combined the tube-type collar (“stove-pipe”) with a broad E collar. The E collar part of it was removed at night.



This is a commercially available collar that has snaps. Additional padding is required around the neck. For smaller birds, these may be too heavy.

Procedure

Returning the bird to its home cage or carrier

Purpose: To safely return a bird that has been restrained and is still in a towel to its home environment. Care must be taken to not entangle wings or legs/feet and also not to allow the bird to grab with its beak and potentially suffer a neck or beak injury.

Technical Action

- 1) Prior to replacing the bird, assess the cage as to where perches, dishes, toys, and doors are located. In some cases, some of these items may be temporarily removed (such as swinging toys and water in a water dish) especially prior to moving the cage and transport.
- 2) Open the largest entry of the cage as the bird is still bulky within the towel.
- 3) Preferably, place the bird in the towel inside the cage, on the floor of the cage, and gently unwrap the towel. Usually, you can withdraw the towel and yourself prior to the bird flying/climbing upward in the cage. If not, allow the bird to move and seek perching and then withdraw.
- 4) Some large birds, in large cages, that are fully awake can grasp a perch and can then be unwrapped. Some larger birds may prefer to grab the side of the cage with their beaks as well as their feet as you are releasing them.

Rationale/Amplification

- # 1: You do not want obstacles in the cage to get the towel or your hands caught in. Swinging toys and too many perches or dishes can get in the way of the bird escaping the towel and flapping its wings. It can injure itself on any of these things in its haste to get away. A bird can fall in a water bowl and get very wet – not advisable in an already stressed bird.

- # 3: Placing the bird on the bottom of the cage allows it to become oriented within its environment without problems of balance loss, falling off a perch, etc.
- # 4: If the bird grabs the cage or perch with beak and/or feet, take care in unwrapping it and removing your hands. The bird needs to balance itself as you withdraw.

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