

Special Considerations for Community Cats at Spay/Neuter Clinics



Best Practices for Medical and Management Protocols

Community cats may be socialized cats who live outdoors all or part of the day, unsocialized feral cats – or anything in between!

community cat may be part of a managed colony. When a caretaker dedicated to a specific colony brings cats to the spay/neuter clinic for surgery, the program is generally referred to as a Trap, Neuter, Return (TNR) program. The colony caretaker will know the cats and may even know their medical history and current health status.



Community cats may also be part of a Shelter, Neuter, Return (SNR) program. In this type of program cats are brought to the clinic to be spayed or neutered and returned to the location where they were trapped if they appear to be in good health, even though there is not a known colony caretaker.

Regardless of the level of socialization and their daily activities, cats who present to the spay/ neuter clinic for surgery in a humane trap require an understanding of their lifestyle and medical and management protocols that takes their

special needs into consideration. All protocols used for spaying and neutering community cats must meet the standards set forth in the Association of Shelter Veterinarians <u>veterinary medical care guidelines</u> for spay-neuter programs which was first published in the July 1, 2008 issue of **JAVMA**.

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Trap Handling

Free-roaming cats who arrive at the clinic in a humane trap or transfer cage are generally more afraid and agitated than well-socialized cats who arrive in carriers. Pet cats are usually placed into the carrier by someone they trust and may be comfortable with being transported, while cats in traps find themselves abruptly confined against their will. Traps or transfer cages that hold community cats should be covered with a bed sheet or other thin fabric while they are at the clinic and do not need to be observed for anesthetic induction or recovery. Covering the cats provides them with a sense of security, helps keep them calm and can prevent self-induced traumatic injuries.

Each trap or transfer cage should be labeled with a tag that identifies the patient and the person, rescue group or shelter that brought the cat and the trap to the clinic.



There are many manufacturers and models of humane traps and transfer cages. A practitioner and the staff that will spay/neuter cats arriving in traps should be familiar with the way most common types work and how to most easily remove and replace the patient into the trap. The doors of the traps should be secured at all times during transport to and from the clinic to ensure that the cat cannot escape.

Physical Exam

When a cat arrives at a spay/neuter clinic in a trap, it should be assumed for the safety of the patient and the clinic staff that the cat is not easy to handle, and protocols should be followed that reflect the cat's likely behavior. Each patient should receive a visual examination by a veterinarian prior to the administration of any medications and anesthetic induction. Such an assessment can yield significant information regarding the patient's physical status such as:

- General body condition
- Hair coat/skin condition
- Mucous membrane color
- Presence/absence of ocular and nasal discharges
- Breathing rate and effort/congestion
- Pregnancy
- Lactation status
- Presence of wounds/injuries

Each patient should be visually checked for an ear tip prior to any premedication being administered. An ear tip is a symbol that the cat has already been spayed or neutered and the check must be confirmed to avoid unnecessarily anesthetizing a patient.

While much information can be gathered by a visual examination performed by a trained professional, there are limitations, such as not being able to auscult the heart or palpate internal organs. Concerns may include:

- Heart murmurs and arrhythmias
- Abnormal lung sounds
- Abdominal masses
- Enlarged kidneys
- Pregnancy (if not visually obvious)
- Pyometras/hydrometras
- Injuries and abscesses

Patient Selection

Since spaying and neutering are elective procedures, typically a surgeon would choose to perform these procedures on animals who are completely healthy without any medical concerns either from injury or infectious disease. However, this is not always possible or advisable when working with free-roaming cats. While one does not want to put the individual patient at any undue risk, one must consider the implications of postponing the surgery on the individual patient and the health and welfare of the colony or group. For example, consider the following:

- Will this patient allow himself or herself to be treated so recovery is possible from the medical issue observed? If the patient is held for treatment, will the stress of being held outweigh the benefit of the treatment?
- Will this patient's health improve without treatment?
- Is there a wound or other issue that can be addressed at the same time as spay/neuter?
- Will this cat allow himself or herself to be trapped again? Will this be the only opportunity to alter this particular cat?
- What is the population impact of NOT spaying or neutering this patient at this time?

In response to the above concerns, clinics that spay and neuter community cats usually apply a different set of criteria to patient selection as opposed to pet cats. Below are some basic guidelines to determine a community cat's fitness for surgery:

- Surgery is usually performed when:
 - » There is mild/moderate URI
 - » Patient is pregnant/fetuses are aborted/euthanized
 - » Patient is thin
 - » Patient has an abscess or wounds
 - » Patient has an unkempt hair coat
- Surgery is NOT performed if:
 - » Conditions are severe and anesthesia/surgery would be life-threatening
 - » Euthanasia is considered an option based on the severity of the condition

Once it is determined that a community cat is a candidate for surgery, it is important to accurately weigh each patient to calculate the appropriate doses of anesthetics and analgesics. Patient weight should be determined prior to the administration of any pre-medication or anesthetic agent. Patient weight can be determined by weighing the trap or transfer cage alone prior to the trapping of the cat and writing the weight on the trap or cage. Below is an example of a trap marked with its weight to enable the medical team to determine the weight of the patient:



The weight of the patient is the difference between the weight of the trap and the weight of the trap with the patient inside. Each clinic or surgeon should determine minimum weight and age at which patients will be accepted for surgery. A typical guideline is that healthy kittens in good body condition must be at least two months of age and weigh at least two pounds in order to be candidates for surgery.

Anesthesia and Analgesia

There are many acceptable anesthesia protocols for cats being held in traps. The most important factors in choosing a protocol for community cats are that the induction agent(s) must be administered by intramuscular injection and that the medical staff is comfortable with the anesthetic induction, monitoring and recovery. Administration of pre-medication and the induction agent can be done with accuracy by using a trap divider to hold the cat still in the trap. This technique is demonstrated below.



The anesthesia protocols of several prominent spay/neuter clinics can be found on the <u>Association of Shelter Veterinarians</u> website. Any anesthesia protocol chosen must include adequate pain management; a multi-modal approach is considered to be the most effective. Initial pain medication should be given to the patient prior to surgery and allowed adequate time to be in effect when surgery begins. Line and testicular blocks may be included in the protocol to provide additional pain management. Since these cats will not be able to receive ongoing oral medication following surgery, special care should be taken to ensure that pain management is provided by long-acting injection while the patient is sedated at the clinic.

All cats must be carefully monitored for body and neck position while in the trap during induction and recovery. It is possible for a sedated cat in a trap to so severely flex its neck that the trachea will kink and become occluded. This must be immediately corrected manually by the staff, since a cat is able to suffocate in this position.

Patient Identification

As each sedated patient is removed from the trap, it is important to tag the cat in a way that identity is clearly visible. The tag will remain attached to the cat throughout the preparation, surgery and recovery phases and until the cat is replaced back in the trap. A paper or plastic band identifying the cat can be used. In order to ensure that the band is removed when the cat is adequately recovered and returned to the trap, consider placing the band around the cat's chest to make it more visible. It is extremely difficult to remove an identity band from a community cat who is awake in a trap! It may also be helpful for a card that conveys the services requested for each patient to travel with the cat throughout the process at the clinic.



Ear Tip

All cats who arrive at the spay/neuter clinic and will be returned to live completely or partly outdoors must be ear tipped. This will quickly identify the cat as already having been spayed or neutered if it should be trapped again. The cat can be released immediately by the trapper as soon as the ear tip is recognized. If the cat does present at the spay/neuter clinic, the risk of anesthesia can be avoided.



Ear tipping is performed under anesthesia prior to surgery. A clean straight hemostat is placed across the tip of the cat's left ear, exposing no more than 1 cm of ear tip for an adult cat and proportionally less for a kitten. A new, clean hemostat is used for each cat. Use a sterile blade to cut off the tip of the ear that is exposed above the hemostat. Use a new sterile blade for each cat. A silver nitrate stick or small amount of styptic powder is applied to the cut edge of the pinna to control bleeding. The hemostat may be left on the pinna to apply pressure through surgery and recovery and be removed just before returning the cat to the trap.

Surgery

Spay and neuter surgery procedures for community cats are performed in the identical manner as for any other cat in the practice. Each spay must be performed with a new individual sterilized instrument pack. Each neuter must be performed with an individual sterilized hemostat. Suture material can be taken in a sterile fashion from a reel of sterilized suture and used with a sharp sterile needle, or individual packs of suture with swaged on needles can be used. In either case, suture material exposed to a patient must be discarded and not used for another patient. Patients should be carefully monitored during surgery. Medical support staff must be trained to monitor anesthesia carefully using physical parameters. Monitoring equipment such as pulse oximeters are also recommended.

Possible challenges encountered during surgery on community cats:

- Pregnancy. Most clinics choose to spay community cats who are pregnant when they present to the spay/neuter clinic. This is not only because of the impact of the impending litter on the population, but also because this cat may be wiser in the future and not allow itself to be trapped again, leading to multiple additional litters.
- Lactation. A cat who is actively lactating and believed to be nursing
 young kittens dependent on her for nutrition should be spayed and the
 time frame for return should be accelerated. A flank incision approach
 for spay can be considered to avoid the engorged mammary tissue.
 The trapper may choose to go search for the kittens near the site of the
 trapping.
- **Post-partum friable uterus.** Additional care must be taken.
- Incision size. Minimize incision size since it will not be possible to monitor the incision for more than two or three days.
- **Subcuticular closure.** Reinforce with tissue glue it is not possible to do a suture removal on these cats and it will also not be possible to check the integrity of the incision once the cat is released.
- **E-collars.** These cannot be worn by community cats either before or after release. Therefore, it is important to avoid anything that will cause irritation to the incision site and therefore cause the cat to lick or scratch at the incision. Do not use peroxide to clean the skin after surgery, as this is irritating. Avoid crushing sutures in the body wall tighten them to apposition only to avoid tissue necrosis and discomfort for the cat.

Tattoo

Each patient should receive a tattoo at the conclusion of surgery as an additional method of identifying that spay/neuter has taken place. Although it will be necessary to anesthetize and prep the patient to see the tattoo, surgery itself can be avoided if a tattoo is present.

One method of applying a permanent tattoo is to make a skin score (very superficial incision) approximately 1 cm in length parallel to the spay incision on a female cat. A small amount of tattoo ink is placed into the skin score using a clean sterile instrument or indicator strip. A drop of tissue glue is placed over the tattoo site. A tattoo should be placed in a similar location on the ventral abdomen on a male cat. This will require shaving a small amount of hair and gently prepping the area before the tattoo is applied. The tattoo is placed where a veterinarian will shave for surgery if the cat is trapped again and thought to be a cryptorchid or mistakenly identified as a female rather than a neutered male.

Examples of a tattoo on a female and male cat are below.



Female Tattoo



Male Tattoo

Recovery

It is especially important to provide all needed medical support for community cats during and after surgery. Because of the physical and health challenges they face and the need to return them to their environment, it's extremely important for these cats to recover to full strength quickly. Support using the following can help speed recovery:

- SubQ or IV fluids
- Supplemental oxygen
- Antibiotics (if indicated)
- Oral dextrose (to avoid hypoglycemia, especially in young kittens)
- Heat sources:
 - » Heated prep solutions
 - » Heating mats and discs
 - » Gloves filled with warm water
 - » Rice socks
 - » Mylar blankets
 - » Heating pads or hot water circulating blankets
 - » Forced air warming systems
 - » Fluid warmer for fluids administered

Cats who are pregnant or lactating at the time of surgery require additional support and monitoring during recovery.

Any skin wounds or abscesses should be addressed during recovery.

Community cats should be returned to the trap before they are able to exhibit behaviors that will make handling difficult. Remove any collars or bands placed on the patient, and position the cat in the trap with body and neck extended.

Additional Services

The trip to the spay/neuter clinic may be the only opportunity for a community cat to receive any veterinary care. In addition to spay/neuter, each clinic should determine what services it will offer. Services and treatments should be administered appropriately during the recovery phase and may include:

- Vaccinations (rabies, FVRCP)
- Flea control (topical products are preferred)
- Ear cleaning and treatment of ear mites (single application ear mite treatments are preferred)
- Deworming (top spot products are preferred)
- Microchip
- FeLV/FIV testing:
 - » Retroviral testing is generally not recommended for community cats. A good resource for assisting in making the decision to offer testing or not is To Test or Not to Test: Is Testing for FeLV and FIV in Feral Cats Always Necessary? from Alley Cat Allies.

Infectious Disease Control

All surfaces and equipment at the spay/neuter clinic should be carefully and completely disinfected between patients with a product known to be effective against common bacterial and viral agents that affect cats.

Discharge

Community cats who are part of a managed colony should be discharged to their caretaker and discharge instructions should be provided. A standard discharge note should be prepared and reviewed during discharge. This note should be modified for cats who had special issues found during surgery or while at the clinic. Such circumstances may include:

- Females:
 - » Pregnant
 - » Lactating
 - » Pyometra
- Other health issues identified (wounds, infections)
- Additional medications administered or needed
- Change in standard post-op care
- Change in standard post-op holding time

Release Time, Location

Community cats should be released at the site of trapping. That is the cat's home. Reasonable times for the cats to be returned are as follows:

- An actively lactating female cat may be returned to the site of trapping 24 hours after surgery
- Healthy male cats: 24-48 hours following surgery
- Healthy female cats: 48-72 hours following surgery

Confinement may be extremely stressful for free-roaming cats, so if the cat shows signs of extreme stress – repeated attempts to escape the trap or not eating – he or she should be released immediately.

If the cat has a medical problem that was identified at the time of spay/neuter surgery, postoperative holding time may be extended.

If a cat is to be kept for an extended period of time, he or she must be transferred from the trap into appropriate longer term housing such as a large dog kennel with a feral cat den.

More Resources

More information, tips, and resources on spay/neuter protocols and dealing with the special needs of ferals and community cats can be found on **ASPCApro.org**.

The **Resource Library** section provides links to a wide range of content on ferals and community cats in general.