Question: Do you have any specific recommendations for sedation or anesthesia? Limited options are available at my places of employment.

Answer:

There are many preferences, and whatever works in your hands is good. I like "Kitty Magic", and we use Dexmedetomidine combined with buprenorphine +/- ketamine depending on the length and depth of sedation. For anesthesia, we follow with intubation and use isofluorane. This is new in my practice this year, and I think the best one thing we started this year.

For the past several years, we have used buprenorphine transmucosally for all cats needing radiographs. My thinking is that the cats being radiographed had something wrong with them that could be painful, or arthritis in the senior kitties could be making them more challenging to work with. That helped a lot but we still had some upset cats and some frustrated technicians. In those cases, or if we know up front that the cats will be difficult to radiograph, we now use dexmedetomidine and buprenorphine – everyone is happier, less radiographs are taken, less radiation, and we can read the films because positioning is better and there isn’t movement.

Question: What is the best way to restrain a cat for blood draws? What about for urine collection in angry cats?

Answer:

Towel techniques work very well for blood draws. I recommend whatever is easiest with that individual patient. My technicians usually prefer jugular collection because it is quick and the patient doesn't need to be held down for as long. Some people can even do the jugular collection one handed, so that no one else is holding the cat.

For urine collection for the challenging cat, I suggest a couple of options. My first choice, if the cat is not very fearfully aggressive is to wrap the front half of the cat in a burrito towel technique. I have no problems using a muzzle (I like the ones that ensure that the cat can have space to breathe) if the cat is acting like it will bite – they prevent the cat from seeing what is fearful to them, and often that calms them down. And it prevents biting, meaning that we are all safer and the cat doesn’t need to come back multiple times for rabies observation!
If there is still a problem, or the cat is explosive when wrapping in a blanket or putting on a muzzle, Dexmedetomidine and buprenorphine are given IM.

**Good resources are the following:**

Cystocentesis in cats: A guide for veterinary professionals (it is written in the UK thus the spelling). Note that the hind legs are never stretched out completely, which helps prevent fear. Also, the cat is never scruffed.

www.catprofessional.com

I am also attaching their more comprehensive handout for cystocentesis, called “Cystocentesis Handout”.

They also have another educational piece on “Doppler blood pressure measurement in conscious cats”.

In addition, I have done handling videos for Catalyst Council, and “Handling the cat for lab sample collection” can be found at:

http://www.youtube.com/watch?v=C8iAexzg710&feature=player_embedded

**Question:** How do we handle aggressive cats that have a history of injuring staff?

**Answer:**

It is really important to identify whether the cat has a history of injuring the staff because of fear, anticipation of fear because of previous negative experiences, or pain. I try to think of each and make a plan in a stepwise fashion:

- a) Train to the carrier at home
- b) Buprenorphine
- c) Muzzle
- d) Buprenorphine and Dexmedetomidine

Teaching the client to train the cat to the carrier is always an excellent start. Also, I always send home alprazolam with the clients at the time of the appointment if the cat is fearfully aggressive. If starting to do this, there is no need to wait until there is another challenging appointment. Instead, if you know that the cat has had difficulties in the past, contact the client prior to the next visit to work on carrier training and to pick up alprazolam.

Alprazolam dosing in behavior textbooks is much lower than what I find works best. I suggest using 2.5 mg tablets, ½ tablet per 10 pounds, ¾ per 15 pounds, 1 full tablet for cats over 15 pounds and in good condition. It is more effective if given on an empty stomach and given 1 hour before the appointment time.
If the cat is painful – most commonly from arthritis or dental disease – given buprenorphine prior to examining.

I think any cat that has bitten before should be muzzled if the carrier training and alprazolam have not made the cat more relaxed and safer to work with. Every client will agree to this if it’s explained that we don’t want their cat to bite again – to protect people and also so that they don’t need to bring the cat back for rabies isolation.

If the cat is still very upset, then it is safest for the cat (as long as it doesn’t have cardiac disease) and everyone else to sedate with Dexmedetomidine and buprenorphine given IM.

**Question:** Do you have any practical advice on how to deal with aggressive/fearful cats when time is not allotted to handle these situations in a slow manner?

**Answer:**

This is such a terrific question. And the answer is very surprising. We were all concerned about this also in our practice. Surprisingly, if we and everyone else is calmer, the appointments actually take less time! We are not behind like we might have been previously and everyone is more relaxed. And dropping off the cat if it needs to be sedated is acceptable and best for the cat, the client, and us if the cat needs it.

**Question:** Are there any video demonstrations on restraint techniques available?

**Answer:**

There are a few videos:

- Tips for examining a fearful cat
- Massage to calm an anxious cat
- Getting a cat out of a cage
- Handling a cat for lab sample collection


**Question:** How do handle the clients? Many owners respond poorly in the exam room when cats are upset. How do we help the owners act better when their cats are aggressive/fearful?
Answer:

Make them part of the solution. I think a lot of the clients respond poorly because it is so out of character for their cat to react this way. They think someone is in the wrong – either the cat (they yell or scold the cat, or try to hold it down); they are because they did something their cat doesn’t like – a big part of why they dread bringing their cat to the vet; or we are the problem – we didn’t treat the cat well, weren’t nice, etc.

I think most people react better if they have some control over the situation. There are 2 areas in which we can help clients have that control – one is to help them recognize that they are a very important support for their cat, and training their cat to the carrier in a positive and calm manner will reduce fear for their cat.

Secondly, it is important to help them understood that the reason their cat is reacting as it is, is because of fear. And because “their cats are so in tune with them” or “love them so much”, their cats can tell when they are stressed or upset and it causes them to be even more fearful. The best thing is to remain calm both at home while preparing for the vet visit and while at the clinic.

We all have those clients that who are still overly upset or anxious, and when people are very upset it makes it hard for them to listen well. If the above doesn’t work, my next strategy is “I don’t want the cat to associate you with the vaccination or the diagnostic testing or the examination, all of which are so important to keep you cat healthy and happy and with you for as long as possible. It’s best for you to wait in the reception area so that you will be ‘the good guy’.” My experience is that these clients are glad to go wait in the reception area, whether it is because of what I said, the relief of not seeing their cat that way, or the coffee, tea and KitKat bars!

Question: With respect to using oral meds for car travel, anxiety and sedation, do you have any dosage recommendations?

Answer:

Alprazolam is an excellent short-acting benzodiazepine that does not cause hepatotoxicity. The dosing in behavior textbooks is much lower than what I find works best. I suggest using 2.5 mg tablets, ½ tablet per 10 pounds, ¾ per 15 pounds, 1 full tablet for cats over 15 pounds and in good condition. It is more effective if given on an empty stomach and given 1 hour before the appointment time.

I do not use sedation for car travel because it doesn’t address the underlying problem – the fear or anxiety that the cat has. Acepromazine in a tranquilizer and it does not address the fear and it can disinhibit aggression, making the cat even more aggressive.

Question: I was wondering how you deal with purring cats when you need to auscult their heart/lungs? Any tips for stopping purring without making the cat uncomfortable?
Answer:

Good question. Often I will wait to auscultate the heart and lungs in the purring cats until lab sample collection stops the purring. If sample collection is not needed OR if they still purr during sample collection, I will often use a cotton ball with alcohol placed near them. If they smell it, they stop purring. If that still doesn’t work, I open the exam room door with cat in arm and stethoscope on his or her chest and readied as soon as they stop purring (note, this is the only time I think the cat should be carried without something around it, such as the carrier or a towel.) Rarely do we need to turn on the faucet. The main point is to do only what is needed to get them to stop purring, and not going further! In the past, we just took them to the water faucet and many of the cats were already fearful the minute someone unfamiliar took them out of the exam room.

Question: In the presentation Dr. Rodan mentions the use of dexmedetomidine SC at low-end doses. Since I can't find a published resource for the use of dexmedetomidine SC, I was hoping to get her input on the actual dose range she uses for sedation (simple procedures like blood draws) and whether she still gives antisedan IM rather than SC for reversal.

Answer:

These may not be doses published or those that others prefer, but I am adding what we have as part of the practice SOP for premedication and sedation:

*Premedication/Sedation procedures used for each patient is Doctor Preference*

**Note: Dexmedetomidine should not be used in cats with cardiac disease!**

For Radiographs or Anxious/Challenging Patients

**Kitty Magic**
- **Do not** give the cat premedication if using the Kitty Magic with Buprenex added in.
- Draw up 0.2ml Buprenex and 8mcg/kg Dexmedetomidine into one syringe and mix.
- Give injection intramuscular. Within 4-5 minutes of injection, the patient should be sufficiently anesthetized to examine or take radiographs. Sedation will likely last 20-30 minutes.
  - **Note:** Dexmedetomidine will profoundly drop heart function
- Recovery of patients should be in a darker area to decrease stimulation.
- If the patient is having a slower recovery, the Doctor can recommend using Atipamezole which is the reversal agent to the Dexmedetomidine. The Anti-Sedan can be reversed with the same dose to the Dexmedetomidine.

For Surgical Induction of General Patients

**Kitty Magic**
- **Do not** give the cat premedication if using the Kitty Magic with Buprenex added in.
- Draw up 0.2ml Ketamine, 0.2ml Buprenex and 8mcg/kg Dexmedetomidine into one syringe and mix.
- Give injection intramuscular. Within 4-5 minutes of injection, the patient should be sufficiently anesthetized to examine or take radiographs. Sedation will likely last 20-30 minutes.
  - Note: Dexmedetomidine will profoundly drop heart function
- Recovery of patients should be in a darker area to decrease stimulation.
- If the patient is having a slower recovery, the Doctor can recommend using Atipamezole which is the reversal agent to the Dexmedetomidine. The Atipamezole can be reversed with the same dose to the Dexmedetomidine.