

A Proactive Approach to Canine Osteoarthritis

As a veterinary technician, you play an important role in helping to recognize the early signs of osteoarthritis (OA) in your canine patients as well as educating dog owners about this common joint disease. By proactively observing your patients and engaging with clients, you can help dog owners understand why routine OA exams are essential and help more dogs get the treatment they need. This session will pair technical information on the disease state with communication tools and techniques so that veterinary technicians will leave this presentation feeling empowered in their observations and conversations with the veterinarian and pet owners.

Speaker Bio:

A licensed veterinary technician with master's degrees in physiology and counseling psychology, Kara Burns began her career in human medicine working as an emergency psychologist. She is the founder and president of the Academy of Veterinary Nutrition Technicians and teaches nutrition courses around the world as a nutritional consultant. She is also the director of veterinary nursing for NAVC Publishing as well as the editor-in-chief of Today's Veterinary Nurse.

Ms. Burns is a member of many national, international, and state associations and holds positions on many boards in the profession, including American Academy of Veterinary Nutrition executive board technician liaison, Western Veterinary Conference technician education manager, NAVTA past president, PrideVMC board treasurer, International Society for Sports Nutrition, and the Pet Nutrition Alliance executive board.

Ms. Burns has authored many articles, textbooks, and textbook chapters and is an internationally invited speaker, focusing on topics of nutrition, leadership, and technician utilization. She has been featured on the cover of the Veterinary Technician Journal and The NAVTA Journal. She was named the NAVC Technician Speaker of the Year in 2013 and in 2016. She was also the 2010 NAVTA Veterinary Technician of the Year, as well as the 2011 Dr. Franklin Loew Lecturer.

Her pet family includes a French bulldog, an Aussie/border collie cross, birds, and 3 indoor cats.

Learning Objectives:

1. Review the stages of osteoarthritis (OA), the cycle of untreated OA, and goals and considerations regarding the multimodal management of OA.
2. Understand the importance of an early assessment and address the common misconceptions about OA (e.g., age, breed, clinical signs).
3. Recognize best practices for being proactive in OA assessment—what to look for, what is commonly missed, and tips to excel.
4. Learn communication techniques to project a consistent message and appropriately deliver the relevant information about OA to dog owners.



**Kara M. Burns, MS, Med, LVT, VTS (Nutrition)
VTS Hon (Internal Medicine, Dentistry)**



Our speaker today is Kara Burns, and she'll be presenting a proactive approach to canine osteoarthritis. Kara is a licensed veterinary technician with master's degrees and-- yes, that's double-- master's degrees in physiology and counseling psychology.

Kara began her career in human medicine working as an emergency psychologist. She is the founder and president of the Academy of Veterinary Nutrition Technicians and teaches nutritional courses around the world as a nutritional consultant. She is also the director of veterinary nursing for NAVC Publishing, as well as the editor-in-chief of Today's Veterinary Nurse.

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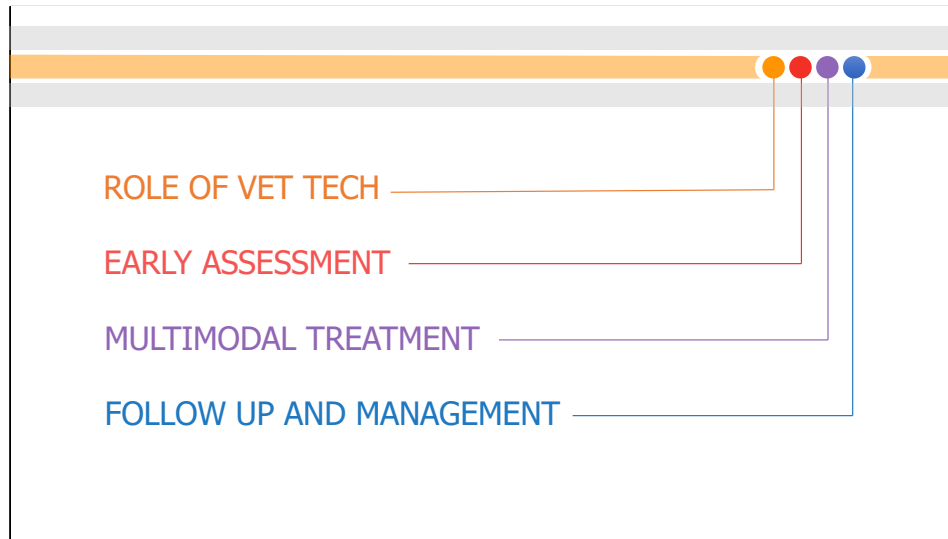
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Her pet family includes a French bulldog and Aussie/Border Collie cross, birds, and three indoor cats. I also want to thank Boehringer Ingelheim for sponsoring this presentation tonight. We so appreciate the educational opportunities and support they continually bring to veterinary medicine. So now, I will stop talking and hand it over to Kara for the presentation.

Hi, everyone. Thank you so much, Julie. This is phenomenal. I'm so excited to be here to talk to you about canine osteoarthritis. And late breaking news, I have two French Bulldogs. [LAUGHS] I need to update my bio. [LAUGHS] But two French Bulldogs and the Border Collie/Australian Shepherd cross.

But we are going to be talking tonight about canine osteoarthritis,

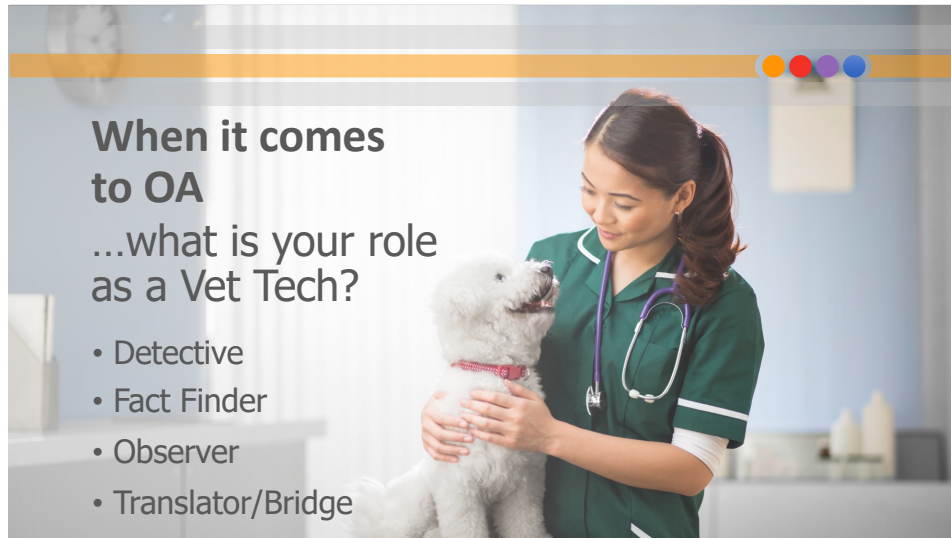


and we are really going to look at what is our role or what is the role of the veterinary technician. I'm going to speak as a veterinary technician because that's what I am. But if there are any veterinarians that are tuning in tonight, thank you and welcome.

And so I want you to look at it as-- when I'm saying our role, you can look at that as increasing utilization of your technicians while you are doing your doctor things that only you can do.

So again, we're going to talk about the role of the vet tech. We're going to look at early assessment, multimodal treatment of osteoarthritis, and then we're going to talk about follow up and management.

And so we're really going to walk through the entire process, if you will, when it comes to a patient with-- or maybe we don't know yet-- that they have osteoarthritis. So there we go.



When it comes to OA
...what is your role as a Vet Tech?

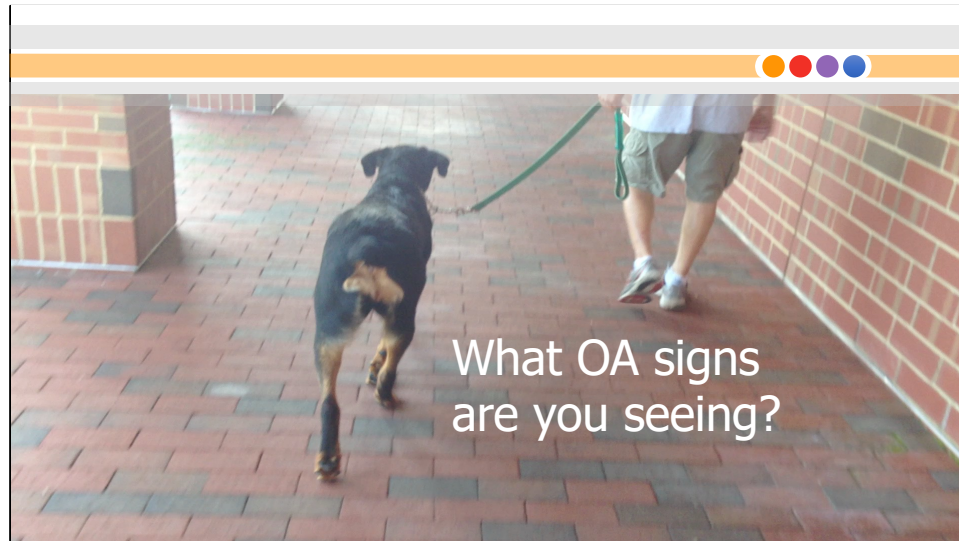
- Detective
- Fact Finder
- Observer
- Translator/Bridge

So when it comes to osteoarthritis, what is the role of the veterinary technician? What is our role? And if I were to ask you, you'd probably say, well, we're going to talk to the pet owner. But we are the detective, right?

We're the fact finder. We're the observer. And we're going to start right off with that one. And we're the translator. We're the bridge between-- the communication bridge between the veterinarian and the pet owner.

Because, again, our veterinarians are going to make recommendations. And we're going to ensure that our clients want to understand that, to accept it, that makes sense, that it works for them, because that will help increase compliance.

So I said, we're going to start with our role as observer.



And in doing so, I'm going to play this short video and ask you to observe. What, if any, osteoarthritis signs might you be seeing?

So here we go. We have a young Rottweiler, rockwheeler, whatever your clients call them. What do you see? I'll play that one more time. What do you guys see in this? I know it's hard on a webinar because I like to be interactive, so I'm sure that you are telling me that when you're watching this, yeah, we see quite the sway back here.

We're seeing stiff, lame legs, and that huge sway, and that sway is definitely indicative of osteoarthritis.

What is OA?

It is a joint disease estimated to affect 1 in 5 dogs.¹

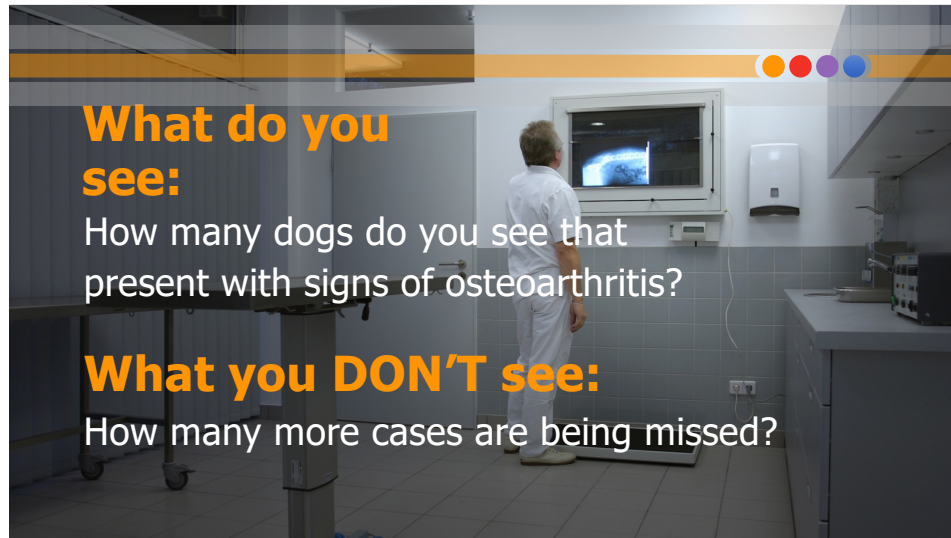
Below the text, there are silhouettes of five different dog breeds: a long-haired breed, a bulldog, a pointer, a golden retriever, and a small breed. To the right, a person is walking a dog on a leash against a sunset background.

1. Johnston SA. Osteoarthritis. Joint anatomy, physiology, and pathobiology. *Vet Clin North Am Small Anim Pract.* 1997;27(4):699-723.

So if I were to take a step back and ask you guys, what is osteoarthritis? You would tell me it's a joint disease, and you would tell me that it's estimated to affect about 20% of adult dogs or one in five dogs.

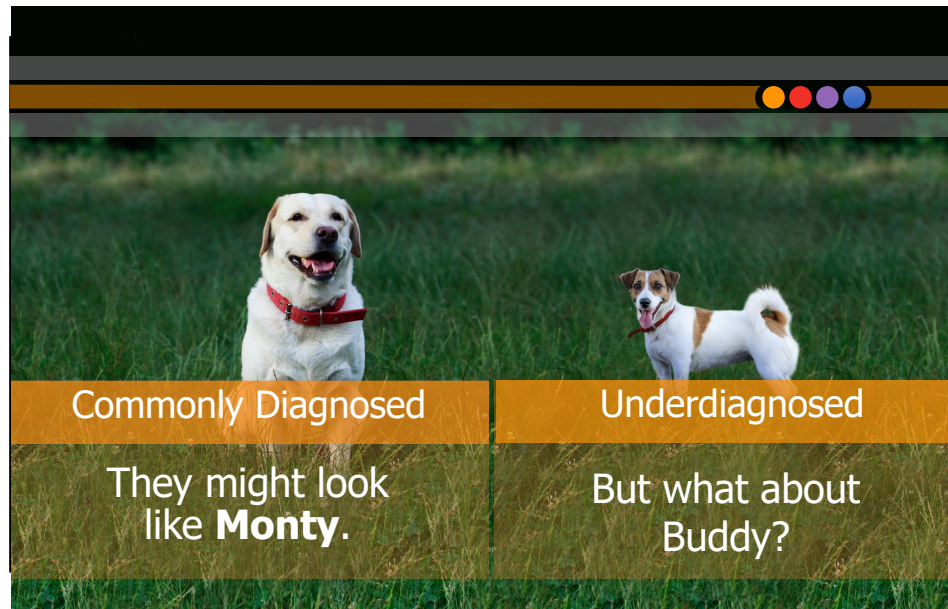
And I use joint disease because it's easier when we're talking to clients to use that term, joint disease. It's more relatable than is osteoarthritis. Although many of our clients probably do understand osteoarthritis because of they either potentially have it themselves or know of someone in their family or friend that has arthritis.

But if we talk about joint disease, like I said, it's more relatable. It really delves right down into what we're talking about.



So how many cases are we seeing? You saw the last slide, the literature states about 20% of adult dogs coming in have osteoarthritis, 33% of adult cats.

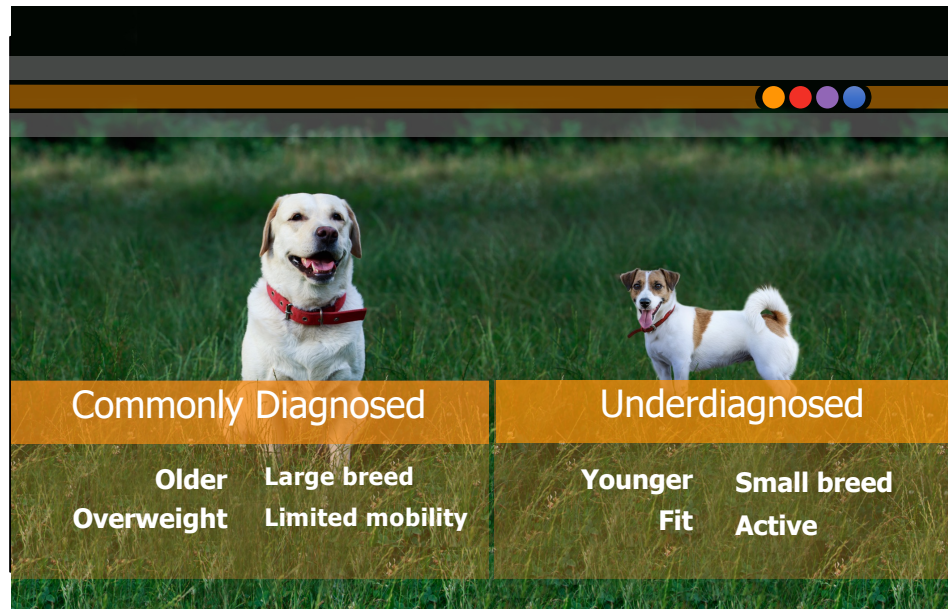
So we're seeing dogs and cats presenting with signs of osteoarthritis, but how many more cases might we be missing? Because they're not presenting obvious signs.



Well, let's think about it.

The typical osteoarthritis patient may look like Monty here on the screen, a larger breed. Can't really tell in this picture, but perhaps he's a little overweight. This is what we think about.

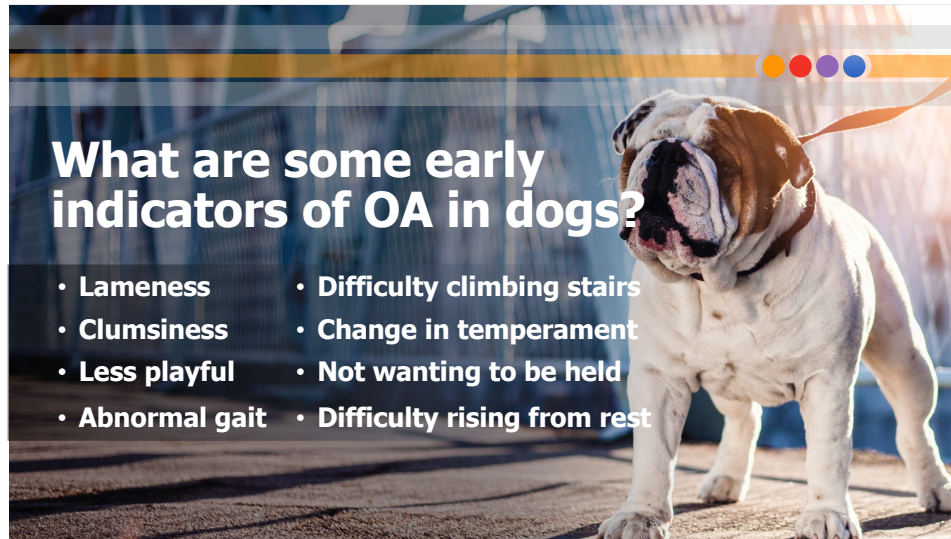
But what about Buddy? Buddy, those little Jack Russell Terriers or those little dogs that are bouncing off the walls, and we're not really focusing on them. And I'm not saying you who are here tonight listening. But as a profession, we are finding that these are more underdiagnosed, so we're going to look at that.



So those commonly diagnosed, again, they're older. They're overweight. They're larger breeds, as I said. And they don't have great mobility, especially because they're older and overweight.

But we're not diagnosing those that-- we know they're younger, but does that mean they can't have osteoarthritis? They may be more fit than some of our overweight, larger breed dogs. They're small breed. They're active.

But again, I'm going to ask you, does that mean that they cannot come down with osteoarthritis? Is it just a large breed dog disorder or disease? No. Of course not.



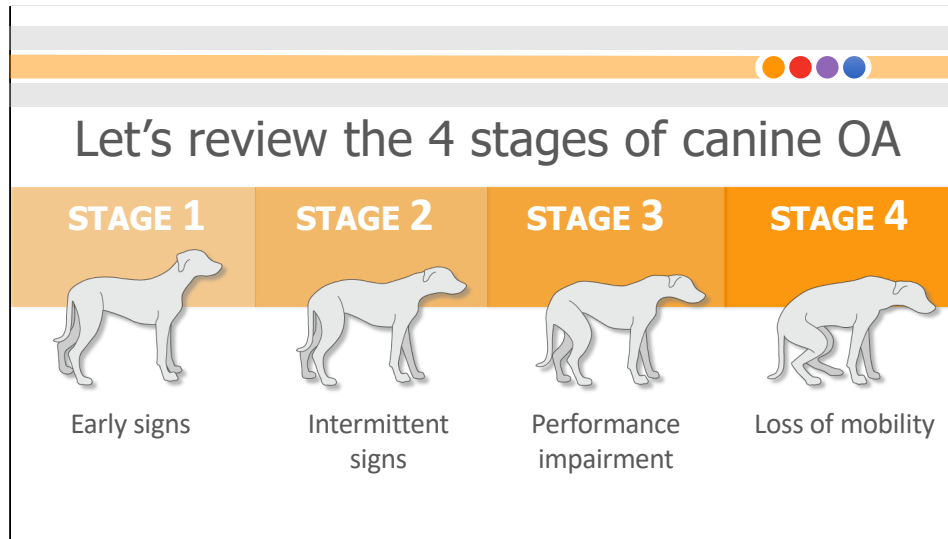
What are some early indicators of OA in dogs?

- Lameness
- Clumsiness
- Less playful
- Abnormal gait
- Difficulty climbing stairs
- Change in temperament
- Not wanting to be held
- Difficulty rising from rest

So if I were to ask you, what are some early indicators of osteoarthritis in dogs? And here we have an English Bulldog, osteoarthritis or joint disease probably isn't the first thing that you think about when you see an English bulldog.

But what are some of those early indicators? Lameness. Clumsiness, that's an interesting one. And how are we going to really find out that information? Yes, we will observe, and we'll talk about that. But taking a history, talking to the client is really going to help us with these early indicators.

They're less playful. Smaller breed dogs with osteoarthritis seem to have more difficulty climbing stairs than do our larger breed dogs. Change in temperament. Do you no longer want to be held in that crushes, the pet owner? And we do know difficulty rising from rest is one of the standard indicators of osteoarthritis.



So there are four stages of canine osteoarthritis. So let's take a look at these. Stage 1 these are the early signs. These are harder definitely for our pet owners and sometimes harder for us to identify.

They're typically growing dogs or young adults. And they only show intermittent signs that only lasts for a few seconds or a few minutes, so it makes sense that maybe our owners aren't picking up on this.

Stage 2 is more intermittent signs, those first flare-ups. But it's easy for our owners to rationalize and ignore. Maybe they were a weekend warrior, and they went hiking. And the owner notices that they seem to be a little sore. But then Monday or Tuesday comes around, and they're doing much better.

Stage 3 Now, we're starting to see and our owners are starting to see performance impairment, progressive loss of ability to perform activities of daily living, and it's more impactful on our pet owners.

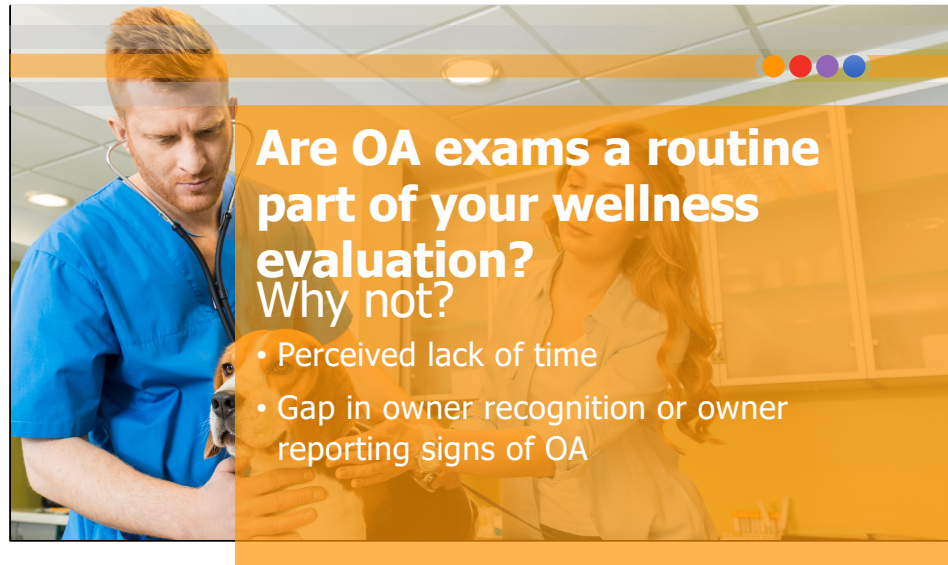
Dogs are becoming exercise intolerance, and they're showing difficulties performing those ADLs. They're not getting out of their beds as quickly to go outside. So they may start to have some urination accidents.

And then stage 4 is loss of mobility. They've lost strength and fitness. They've lost pretty much their ability to walk. These guys are so much harder to manage. And let me remind you that both young dogs in old dogs can be in any of these stages.



So if left untreated, osteoarthritis becomes this vicious cycle. We have decreased muscle tissue and decreased mobility, so alterations in motor function. We're seeing structural modulation.

We're seeing the deterioration of that articular cartilage and increased mechanical stress on the joint itself. Increased pain sensation, and we're seeing a release of inflammatory mediators. And we don't ever want to see our pets, our patients in pain. But that is what is happening, especially if osteoarthritis is going untreated.



Are OA exams a routine part of your wellness evaluation? Why not?

- Perceived lack of time
- Gap in owner recognition or owner reporting signs of OA

So let me ask you another question. Are osteoarthritis exams-- are orthopedic exams a routine part of your wellness evaluation? And I know it's hard on here to say yes or no. But if you said no, [LAUGHS] then I'm going to ask you, why not? Because of we need to be picking up on more cases.

We need to be picking up on the cases that aren't the norm, like the Jack Russell Terriers. So it's also important to remember-- and I don't think I have to remind you guys, but I will. [LAUGHS] Dogs tend to be highly stimulated in the clinic, and so they often don't display the clinical signs of osteoarthritis that they might have at home.

So we can't think that this is a lack of time or a waste of time. There's a gap in owner recognition or owner reporting signs of osteoarthritis. So we need to start putting these osteoarthritis exams into our wellness evaluations.



And so let's look at some of the steps to help us be-- we as the veterinary team-- to help us be more successful. We absolutely know that veterinarians treat osteoarthritis. They make the recommendation. They develop the treatment plan.

But for the vet techs that are out there, we're the ones who fulfill the doctor's orders and are involved in the treatment. We more often than not are the ones working hand in hand with the pet owner to help that patient and manage that patient's osteoarthritis.

So we're going to look at assessment, treatment and management, and follow up because each one of these is extremely important.

ASSESSMENT

BE PROACTIVE IN YOUR ASSESSMENT

PROACTIVE OBSERVATION
Look for early signs of OA in young, growing, and adult dogs. Continue to monitor over the dog's life.

So part of a proactive conversation really is about educating the pet owner to recognize signs of pain in their dog or in their cat, and we should also be correcting misperceptions.

So we should be educating them, and we should be looking for early signs of osteoarthritis in young, in growing dogs, and in adult dogs. And as a team, we should continue to monitor this over the life of that dog.



BE PROACTIVE IN YOUR ASSESSMENT

PROACTIVE CONVERSATION

Engage the owner and ask questions to gather more information.

Keep the vet informed.

Let your observations lead your conversation.

We have to be proactive in our assessments. So part of proactive conversation is educating the pet owner to recognize the signs of pain in their dog or again in their cat and correct misperceptions as I mentioned.

So we want to engage the owner, ask questions to gather more information. We should be taking the history on this patient. Yes, whatever we gather, we are going to keep our veterinarian informed. We work as a team. We work hand in hand.

And we also are observing. Going back to that first video. I asked you what you were seeing, and I know you couldn't really say, but I know many of you picked up a number of different things. And so those observations that we picked up on are going to lead our conversations, both with our pet owners and with our veterinarians.

TREATMENT **MULTIMODAL APPROACH**

Treatment recommendations are based on information gathered through your observations and conversations.

Successful treatment plans are tailored to each patient's unique needs.

So when we talk about treatment, treatment recommendations are based on information that we've gathered through the observations that we've had, that we've seen with our patients coming in, and through the conversations that we have had with our pet owners.

And from here, again, in combination with our veterinarians, successful treatment plans will be made and tailored to each patient's unique needs. Because, remember, this vicious cycle here, we're trying to break this cycle.

FOLLOW-UP

CONTINUED CONVERSATION

Successful treatment requires ongoing observation, communication, and commitment from the owner and veterinary team.

The treatment plan may need to be modified.

And we're going to get into each one of these a little bit more in depth.

So we are going to always continue the conversation, and that's true in so many different scenarios, disease conditions. Follow up. Follow up, follow up, follow up. Successful treatment requires ongoing observation, ongoing communication, and ongoing commitment, from not only the veterinary team but the pet owner.

So through our follow up, we may find that the treatment plan needs to be modified. So I mentioned that we're going to go into more detail with these three,



ASSESSMENT

Hi! My name's Buddy!

AGE: 8 years • BREED: Jack Russell Terrier

A TYPICAL DAY:

Short walk in the morning and early afternoon, longer walk at night. Hiking trips on the weekend.

“ Boy, I sure do love going outside!
But do we always have to go on
such long hikes? ”

So with Buddy-- oops, there we go. All right. So Buddy, he's eight years old. He's a Jack Russell Terrier. We automatically think of Jack Russell Terriers as nonstop dogs. Shoong, shoong. Bouncing off the walls and just loving life.

So we're talking to the pet owner, and we find out that Buddy's typical day is a short walk in the morning and early afternoon, and then a longer walk at night. And Buddy's also hiking with his owners on the weekend. And Buddy is trying to communicate with us to say that-- he sure loves going outside, but do we always have to go on such long hikes?

So we've talked a little bit to the owner. We're going to talk some more. But what about our observation?

PROACTIVE OBSERVATION

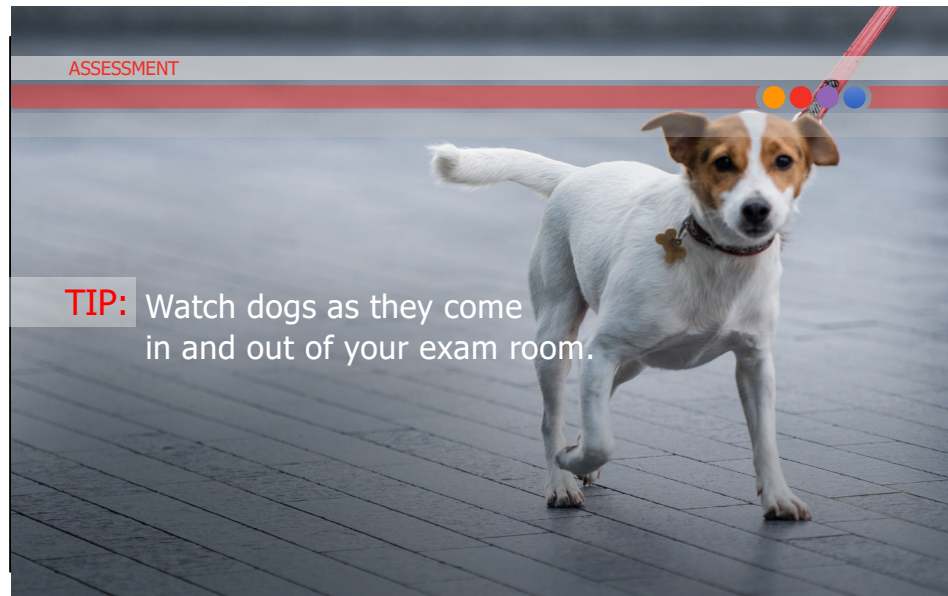
Keep an eye out for signs of OA during every visit, not just appointments with older dogs that are more typical OA patients.

Observe all patients as they get up and sit down.

The observation part of the assessment. So we want to keep an eye out for signs of osteoarthritis during every wellness visit, not just appointments with older dogs that are the more typical OA patients.

We want to observe Buddy and dogs like him as they get up and as they sit down. Because what is that going to tell us? Well, their movement, their ease or lack thereof of sitting and then standing is going to help us distinguish whether he's painful, whether he is lame, whether he's trying to sit in a certain way-- and I know I'm adjusting.

But if he's trying to sit in a certain way to alleviate pain, very important for us as veterinary technicians to make these observations.



And another tip is that we should be watching all dogs as they come into the exam room and out of the exam room.

If we're lucky, if we have time, which I know none of you do, especially right now. But I like to watch them come into the clinic. How do they interact with their owner? How do they walk to the exam room? And then, obviously, how walking into the exam room, walking around it, and then out of the exam room?

We really should get down to Buddy's level and interact with them while we're talking with the owner. We can grasp, we can observe so much more.



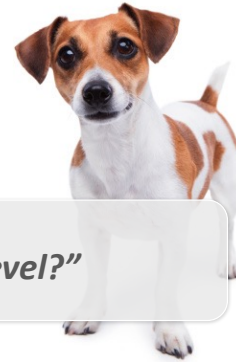
PROACTIVE CONVERSATION

OWNER

What might the owner be dis/missing?

Ask open-ended questions about behavior and activity level to discover early signs of OA.

Questions you can ask:



“How is Buddy’s activity level?”

So let's also have a proactive conversation with the pet owner. So what is this pet owner dismissing or what are they missing?

We want to ask open-ended questions about behavior and activity level to identify early signs of potential osteoarthritis that we know the owner's not going to pick up on their own.

So one open-ended question you see right here-- how is Buddy's activity level? Typically, you won't get a yes or no. You're going to get an open up a conversation about Buddy's activity.



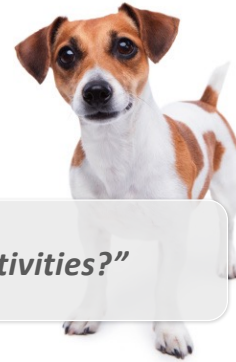
PROACTIVE CONVERSATION

OWNER

What might the owner be dis/missing?

Ask open-ended questions about behavior and activity level to discover early signs of OA.

Questions you can ask:



“What are Buddy’s favorite activities?”

We can also ask, hey, what does Buddy like to do? What are his favorite activities? Because we want to ask about lifestyle and give a chance for the owner to answer.



PROACTIVE CONVERSATION

OWNER

What might the owner be dis/missing?

Ask open-ended questions about behavior and activity level to discover early signs of OA.

Questions you can ask:



“Have you noticed any changes?”

And while they're thinking about it-- I know this is hard for so many of us. But we have to pause. Let them formulate. Let them think and then formulate an answer, and then ask, have you noticed any changes?



PROACTIVE CONVERSATION

OWNER

- Engage the owners on the common signs
- Explain the difference between normal and abnormal posture and gait



What are some OA misconceptions you hear at your clinic?

We can engage the owner on the common signs of osteoarthritis. Many owners are unfamiliar with the difference between normal and abnormal posture and normal and abnormal gait. We want to educate the owners on these common signs and debunk the misconceptions around OA pain.

So we have the head bang where as they walk their head is accentuated going up and down. And then as we saw earlier, we have that wiggle where the whole hind end is going from side to side. I'm sure that you guys have heard some misconceptions at your clinic.

Oh, they can't be in pain, they're just older. Or maybe they're a little more assertive/aggressive. They're not biting, but they're growling when the kids are jumping on the dog or maybe messing around with one of their legs. And it's not because they're grumpy. It's not because they're old. It's because they are in pain.



PROACTIVE CONVERSATION

VET

Discuss with the vet what signs you discovered.

Be concise but don't leave out any relevant details.

So
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OA Check List

- Yes No 1. Have your dog's greetings lost some enthusiasm?
- Yes No 2. Does your dog need help jumping into the car or climbing stairs?
- Yes No 3. Does your dog have muscle twitches, seem stiff or uncomfortable while at rest?
- Yes No 4. Does your dog tire when going for walks?
- Yes No 5. Has your dog's posture and/or expression changed?
- 6. Does your dog display any of the following behaviors? Check all that apply.
 - More irritable
 - Sleeping more
 - Lost interest in playing/toys
 - Reluctance to lay down/sit on command

PROACTIVE CONVERSATION

VET

TIP: Take notes (or use a checklist) during your conversation with the pet owner to make sure you cover everything with the vet.

We can take notes or better yet use a checklist. I love osteoarthritis checklist. And Boehringer Ingelheim has an osteoarthritis checklist for you. And so we should be using this during our conversation with the pet owner to make sure that we're covering everything then with our veterinarians. That we're relaying the important information that we have found.



TREATMENT & MANAGEMENT


Buddy

AGE: 8 years • **BREED:** Jack Russell Terrier

OBSERVATIONS:	CONVERSATIONS:
<ul style="list-style-type: none">• Abnormal wiggle when walking• Leans to the right when sitting• Slight limp	<ul style="list-style-type: none">• Has trouble keeping up with the kids• Avoids the stairs• More tired and “cranky” recently

“ Going up and down stairs seems to be a challenge these days! ”

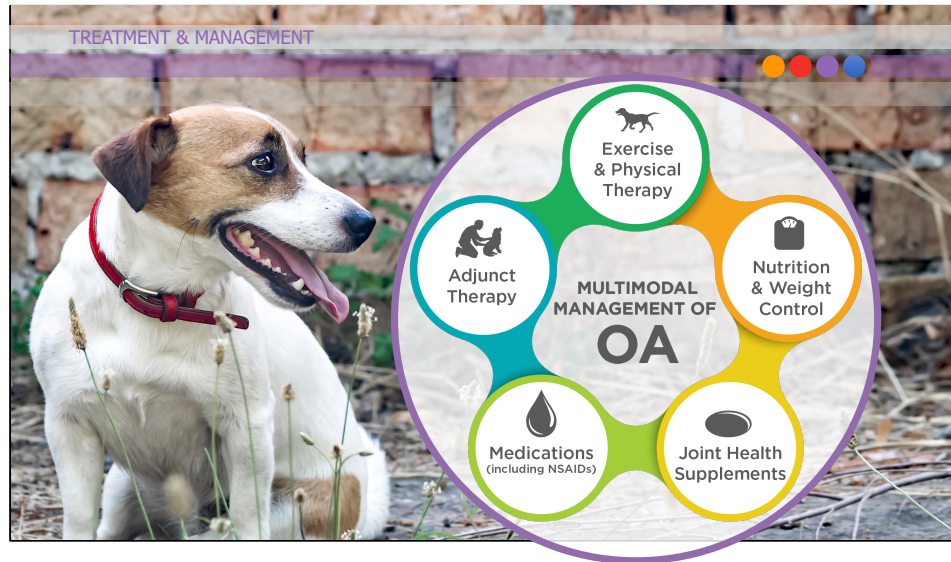
These could be signs of early OA.



So, again, observations are that he's got an abnormal wiggle when walking. [LAUGHS] Try saying that three times fast. [LAUGHS]

He leans to the right when he's sitting, and he has a slight limp. In talking with Buddy's owner, he has trouble keeping up with the kids and that's not like him. He's been avoiding the stairs, and he's more tired and cranky recently.

Going up and down the stairs really seems to be a challenge for Buddy. So we know that these could be early signs of osteoarthritis, and our veterinarian has confirmed that with that stage 1 diagnosis.



So let's look at management of osteoarthritis as a multimodal approach. Hopefully, many of you are looking at it that way. But yes, exercise and physical therapy, hugely important.

Nutrition and weight control-- well, that could be another hour, just going into the nutrients that will help and weight control is of the utmost importance when we're talking about osteoarthritis. Adjunct therapy. Medications including NSAIDs. And joint health supplements.



TREATMENT & MANAGEMENT



EXERCISE & PHYSICAL THERAPY – Early stages (1-2)

GOALS:

- Maintain muscular and cardiovascular fitness and joint motion
- Avoid OA flare-ups

CONSIDERATIONS:

- Vet team plays key role in developing a controlled exercise plan and training owners to follow through

So in early stages, so the stage 1 and 2 of osteoarthritis. If we are looking at exercise and physical therapy, we know it's a key strategy that is used to manage osteoarthritis. While exercise intuitively means that arthritic joints are going to have to do more work, exercise under controlled conditions is extremely beneficial to arthritic joints.

Sorry. My thing is slow. I'm not quite sure what that's about. So what are our goals in stage 1 and stage 2? If we are using exercise and physical therapy, we're trying to maintain muscular and cardiovascular fitness and joint motions, and we're trying to avoid osteoarthritis flare-ups.

So we as the veterinary team have a huge role in developing a controlled exercise plan and training for owners to follow.



EXERCISE & PHYSICAL THERAPY – Later stages (3-4)

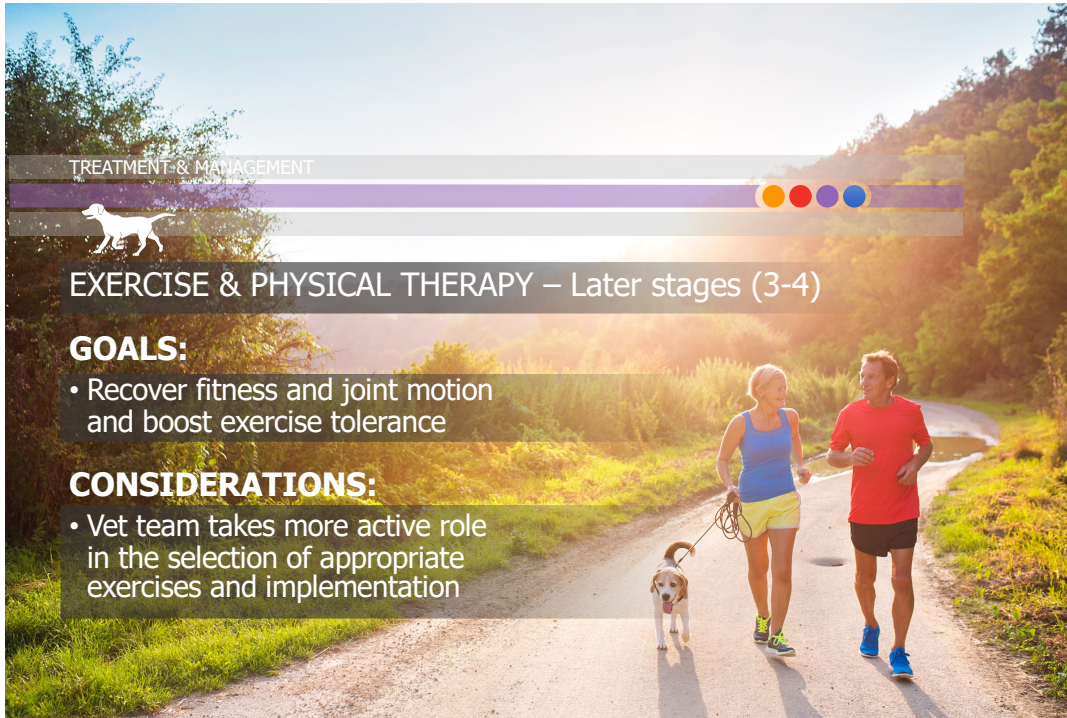
GOALS:

- Recover fitness and joint motion and boost exercise tolerance

CONSIDERATIONS:

- Vet team takes more active role in the selection of appropriate exercises and implementation

So if we look at later stages and again looking at exercise and physical therapy, now our goals have slightly changed. We're trying to recover fitness and joint motion and boost, increase exercise tolerance. So, again, we're taking a more active role in the selection of appropriate exercise and implementation.





NUTRITION & WEIGHT CONTROL

GOALS:

- Slow progression of OA

CONSIDERATIONS:

- OA progresses faster in overweight dogs
- Nutrition management is an effective method of weight control



Nutrition and weight control. Well, we know that our goal is to slow the progression of osteoarthritis. Weight loss should be achieved and sustained with nutritional adjustments. It's more effective for weight loss compared to exercise.

Weight optimization is so hard, but it's extremely effective when we are managing osteoarthritis in dogs and cats, in humans. We need to get the weight off. So we know that osteoarthritis progresses faster in overweight dogs.

The whole inflammatory process of being overweight and having joint disease. The inflammatory process has just gone wild, and nutritional management is one way, along with exercise, that we can effectively manage weight control.

Now, there's other parts of nutrition that also can help. But, like I said earlier, that will take the rest of the night, especially if I'm talking about it. So [LAUGHS] just remember the importance of weight control in osteoarthritis.

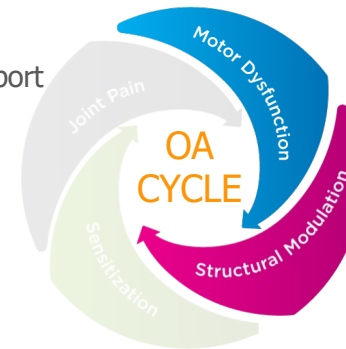
JOINT HEALTH SUPPLEMENTS

GOALS:

- Ongoing mobility and joint health support
- Help with occasional discomfort

CONSIDERATIONS:

- Good for early stages of OA
- Some key differences to consider between supplements when making a recommendation



So joint health supplements. You saw that as part of the multimodal approach. So our goals with joint health supplements are ongoing mobility and joint health support. And these help with occasional discomfort. They're complementary, and they're beneficial for mobility. And they're especially beneficial for dogs in early stages of osteoarthritis.

Some supplements benefit the inflammatory response, which I talked about earlier. So, again, I mentioned early stages of osteoarthritis, and there are key differences between different joint health supplements. So get to know the supplements that are available, talk to your reps, and find out what that mechanism of action is before we make that recommendation.



JOINT HEALTH SUPPLEMENTS

- Glucosamine and chondroitin
- Green Lipped Mussels (GLM)
- Omega-3 fatty acids


Benefits across various stages:

- May enhance mobility
- Supports joint health



As I said, the mechanism of action can be glucosamine and chondroitin. Some have green-lipped muscle. Omega-3 fatty acids. And there are benefits for these across the various stages of osteoarthritis. They have the potential to enhance mobility and support joint health.

TREATMENT & MANAGEMENT



MEDICATIONS

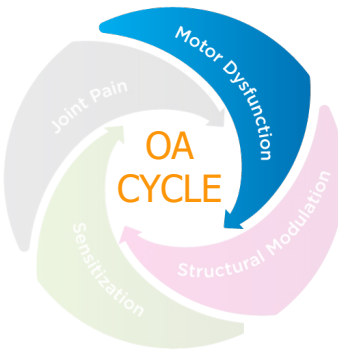
NSAIDs

GOALS:

- Reduce joint inflammation
- Provide pain relief
- Slow osteoarthritis progression
- Convenient

CONSIDERATIONS:

- Side effects



The diagram illustrates the OA CYCLE as a continuous loop of four interconnected stages: Joint Pain (grey), Motor Dysfunction (blue), Structural Modulation (pink), and Sensitization (green). Each stage is represented by a curved arrow pointing clockwise to the next stage, with the text 'OA CYCLE' in the center.

But that doesn't take away from. They can be used in conjunction with NSAIDs.

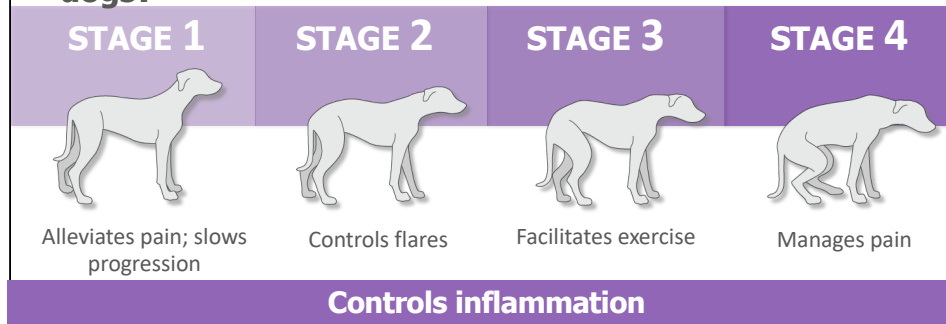
Our goals with NSAIDs are to reduce joint inflammation, provide pain relief, slow the progression of osteoarthritis, and for most owners, they're more convenient. So they're not as time consuming and complex as exercise programs. And although I hate to say it, we know it's true. They're not as emotionally challenging as weight loss programs.

They do play a critical role, as I said, in slowing the progression of osteoarthritis. We have to remember though that a prescription is required and it cannot be purchased over-the-counter. Most importantly, we have to remind and educate our owners about that.

One thing to consider is-- or another thing to consider is that NSAIDs, like most medications, have the potential to cause side effects. Some side effects with NSAIDs-- vomiting, loss of appetite, lethargy, diarrhea.



How are NSAIDs beneficial across all stages of OA in dogs?



So if we look at NSAIDs and how they're beneficial across all stages of osteoarthritis in dogs. Stage 1 that we talked about, NSAIDs helped to alleviate pain and again slow that progression. Stage 2, they're going to help control those flare-ups.

Those weekend warriors that are having those Tuesday blues if you will, NSAIDs will help with that. In stage 3, NSAIDs can help facilitate exercise. And in stage 4, we know how painful this stage is, how painful these dogs are, so NSAIDs in stage 4 will help to manage pain. And across all, they help to control inflammation.

TREATMENT & MANAGEMENT



ADJUNCT THERAPY

GOALS:

- Reduce pain and increase ROM
- Owner involvement
- Joint health support

CONSIDERATIONS:

- Help with various stages of OA
- Good for patients with higher risk:benefit ratio for NSAIDs

So adjunct therapy. There are a number of adjunct therapies. Cold or heat pad application, aquatic therapy, massage, laser therapy. These all go with physical therapy, acoustic compression therapy, acupuncture, even surgery.

Our goals though is to reduce pain but increase range of motion. This also can be a therapy-- the ones that I mentioned where the owner is involved, and some owners want desperately to be involved in the care and the management of this disease process. And our goal is also with these joint health support.

So we know that many of the adjunct therapies that are out there help with various stages of osteoarthritis. And they're good for patients, especially those patients that have a higher risk to benefit ratio with NSAIDs. So if NSAIDs are more risky for them for whatever reason, then one of the adjunct therapies or maybe multiple adjunct therapies would be more beneficial.

What else should be considered?

- Owner lifestyle
- Importance of convenience
- Medication preference

So what else should be considered? Well, if we want to get compliance, the treatment plan as prescribed by your veterinarian, needs to work for the pet owner. So we need to consider the owner's lifestyle, the importance of convenience, and medication preference. Do they want an NSAID? Would they rather go with a joint supplement?

And we're not saying that they are making the decision. We're working together, again, as a team to make sure that Buddy is getting the care and the treatment that he needs and that he deserves, but taking into account that owner, Buddy's owner.

Proactive **CONVERSATION:** Owner

TREATMENT & MANAGEMENT

PROACTIVE CONVERSATION

OWNER

Be the bridge between veterinarian and pet

- Review the diagnosis & reinforce the vet's message

Engage the owner

- How to administer the medication
- What this means for the dog

So remember our proactive conversations? With the owners? Remember, I said we are the bridge. Vet techs are the bridge between the veterinarian and the pet owner. Well, in the pet too, I guess. [LAUGHS]

So we want to review the diagnosis, educate them as to what that means, and reinforce the veterinarians message and recommendation. We want to engage the owner. How to administer the medication? We have to educate them. What does that mean for their pet?

Anticipating and handling questions owners have.

“How long will Buddy need to be on this treatment plan?”

We want to anticipate and handle questions that owners may have. How long will Buddy need to be on this treatment plan? Well, we know that osteoarthritis is a lifelong disease and that there really isn't an end to a treatment plan. It will need to be managed over his life. But with follow up, we can adjust that plan.



Before the pet owner leaves:

- Make sure they understand the treatment plan and product use
- Make sure they know how to contact the clinic
- Provide take-home materials
- Allow for questions

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Before the pet owner leaves, we want to make sure they understand the treatment plan and product use. That's on us. That is on us as veterinary technicians. We want to make sure they know how to contact the clinic, provide those take-home materials. And please, allow for questions.



Before the pet owner leaves:

Ensure the pet owner is committed to the proposed treatment plan.

3 steps to increase compliance:

1. Explain the plan
2. Get commitment
3. Follow-up

We want to make sure that the pet owner not only understands the treatment plan but is committed to the treatment plan. It's important. And again, this falls on us. We must ensure that they understand and are committed to the treatment plan, or we won't have any compliance. And who does that hurt? The patient.

So three steps to increase compliance. Explain the plan. Allow for questions. Pause. Make sure they understand. We can't get to number two if they don't understand and are committed to the plan-- or understand the plan.

Once we are sure that they understand the treatment plan, we're going to gain their commitment. And then we're going to follow up. Hopefully, you guys are all have some follow up plans for all the different disease conditions or procedures that you have in your clinic. But we have to follow up.

After the pet owner leaves

- Follow-up with a phone call 2 days after visit
- Schedule a follow-up appointment in 2 weeks
- Ensure the owner understands that OA is a chronic condition, check-up every 6 months

So after the pet owner leaves, follow up with a phone call, like two days later. We want to ensure they understand. See if they have any questions. And if we sent home material, do they have any questions on the material?

I know it's only been a couple of days, but what questions do you have for us? It's only been a couple of days, how is the plan going? Then we want to schedule a follow up appointment in about two weeks.

So think of two. Two weeks or two days, two weeks, and then once we're on a path and we have gained compliance, then really two months. So we want to schedule that follow up appointment in two weeks, and we want to ensure-- again, we talked about this already.

But when we are doing follow up, we have to ensure that the owner understands that this is a chronic condition. Hopefully, we can see improvement, but osteoarthritis is a chronic condition. And so we should then follow up after the two days, two weeks, two months, then every six months.



Buddy!

AGE: 8 years • BREED: Jack Russell Terrier

CONVERSATIONS:

- Family does not have a lot of free time
- Like to include Buddy in activities
- No issues taking oral medication



So Buddy, conversations with our pet owners, we learned that the family doesn't have a lot of free time, but they like to include Buddy in their activities. He's part of the family. We also found out that Buddy doesn't have any issues taking oral medication. That's an important finding.

Buddy!

AGE: 8 years • BREED: Jack Russell Terrier

TREATMENT PLAN:

- Ease of use and speed are key
- Start with two 10 minute walks a day
- NSAID to reduce inflammation and pain as needed for flare-ups
- Joint health supplement



So the treatment plan as directed by and recommended by our veterinarian is-- we understand that ease of use and speed are crucial, so we're going to have Buddy start with two 10-minute walks per day. An NSAID is going to be prescribed. Again, relaying the veterinarian's recommendation.

And by educating the owner, hopefully then, they'll be more compliant. Why is the NSAID being prescribed? To help reduce inflammation and pain as needed for flare-ups. And then a joint health supplement is also going to be prescribed.

Buddy!

AGE: 8 years • BREED: Jack Russell Terrier

THE VET TECH'S ROLE:

- Clearly explain the treatment plan
- Ensure owner leaves with correct medication and supporting information
- Follow-up with the client by phone within the first week after visit
- Schedule an in clinic follow-up in 2 weeks after initial visit

// I am so glad that our walks are shorter now.
My legs don't hurt as much! //



So what is our role? Well, I think you guys have it by now. Our role is to clearly educate the owner regarding the treatment plan. Ensure the owner leads with the correct medication and supporting information.

Don't be afraid to talk to them and to give them discharge materials. Give them homework if you will. Because then we're going to follow up with the client two days later. Do you understand how is it going? What questions do you have now that it's a couple of days later for me?

And we want to schedule that in clinic follow-up in two weeks. We want to schedule that before they leave. Let's forward book that. And by doing this, Buddy is going to tell us, "I'm so glad that our walks are shorter now. My legs don't hurt as much."

FOLLOW-UP

ASSESSMENT

TREATMENT & MANAGEMENT

FOLLOW-UP
Multimodal plan created, commitment from client

Buddy's OA Journey

So in follow-up,



Follow-up appointments are critical for the care and treatment of the pet.

OA is progressive. Ongoing management is needed for the pet's lifetime.

Follow-up appointments can encourage owners to continue treatment.

we know that appointments are critical for the care and treatment of the pet. Because osteoarthritis is progressive, ongoing management is needed for the life of that pet. Follow-up appointments can also encourage owners to continue treatment. We are supporting them. And by supporting them we are advocating for our patients.



Take the lead! This is your opportunity to:

- Create a constant dialogue with pet owners
- Monitor progress
- Answer questions

Use the follow-up appointments to determine what's working and what's not.

This is our opportunity to lead. We can create a constant dialogue with that pet owner. We are the ones that should be monitoring progress and answering questions using that follow-up appointment to determine what's working and what's not.

And yes, then we take that information, and we talk with our veterinarians to see if there's going to be any alteration in the treatment plan.

PROACTIVE CONVERSATION

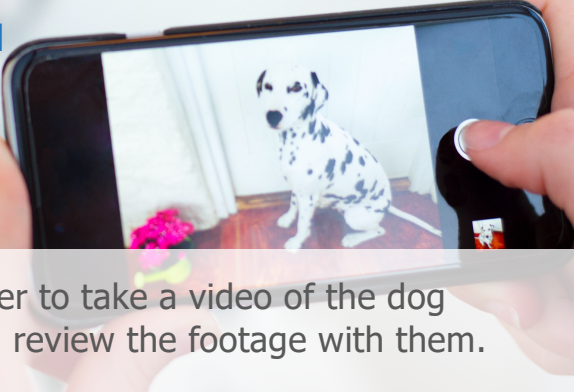
OWNER

Compare gait, resting position, temperament, etc.,
to previous appointment.

So we want to compare the gait, resting position, temperament, et cetera every time we see them to previous appointments.

FOLLOW-UP

**PROACTIVE
CONVERSATION**
OWNER



TIP: Ask the owner to take a video of the dog at home and review the footage with them.

And most everyone has a smartphone, and show me one person that loves their animal that doesn't have hundreds or more guilty pictures of their pet on their phone. So if we ask the owner to take a video of their dog at home, we can review the footage with them. We can do this via Skype. So telehealth.

But this is going to help us-- and it gets the client involved, and they want to be involved. It also allows us to point out signs of improvement. And if we can get the dog in different scenarios, that's going to help us determine if the treatment is working or not. Maybe we can get them going up and down the stairs, sitting down, standing up, going on walks.



PROACTIVE CONVERSATION

OWNER

Discuss progress with the treatment plan.

- Identify obstacles and work together to find solutions
- Must work for the dog owner



Because we want to discuss progress with the treatment plan. We want to identify any obstacles and work together to find solutions. We have to work for the dog owner.

PROACTIVE CONVERSATION

OWNER

Ask probing questions to understand the good and the bad.
Feedback is usually only received when something negative happens.

"What do you think of this plan/treatment plan?"

So we want to ask probing questions to understand both the good and the bad.

Feedback is usually only received when something negative happens. But if we ask probing questions, we can find out both good and bad. Ask the owner, what do you think of this plan? What do you like and dislike about it?

PROACTIVE CONVERSATION

OWNER

Ask probing questions to understand the good and the bad.
Feedback is usually only received when something negative happens.

"What do you like and dislike about it?"

What do you like and dislike about it?

Involve them. Again, the more involvement, the more education that we give, the better the compliance.

PROACTIVE CONVERSATION

VET

- Relay your observations
- Let the vet know about any problems or issues
- Suggest solutions

Then we're going to relay our observations. And to our veterinarian, let them know about any problems or issues. We can suggest solutions, but we're not going to prescribe.

We're going to have this dialogue,

Feedback Programs

Benefits for you:

- Visibility on real-time patient results
- Patient feedback reports and updates

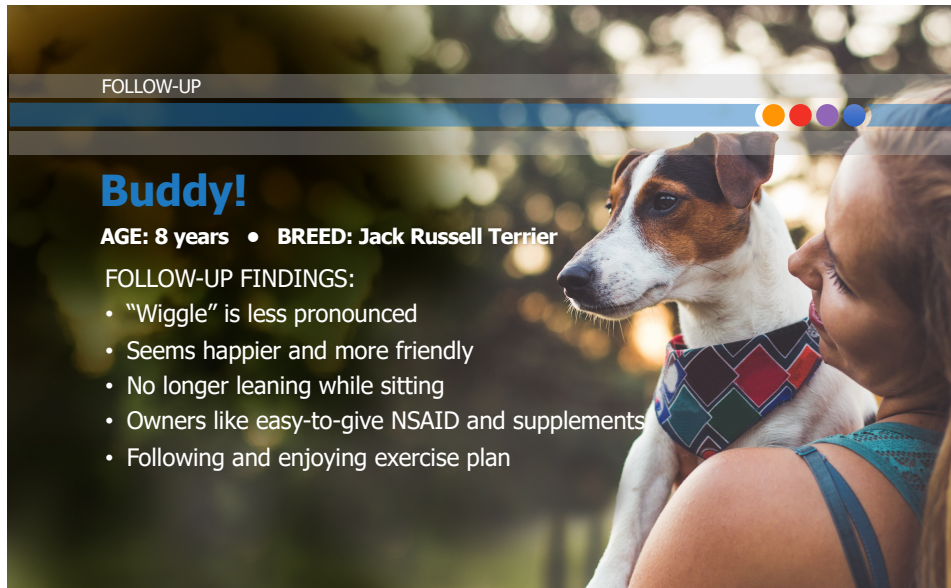
Benefits for the pet owner:

- Monitor and track their pet's OA
- Informative materials
- Involved in the overall plan and long-term care for their family pet

and our veterinarians are going to then make a recommendation, which starts the process. Again, we will take that recommendation and educate our pet owner.

So what are some of the benefits? Feedback programs give us visibility on real-time patient results. Patient feedback reports and updates, those are benefits for us. Benefits for the pet owner, they're monitoring and tracking their dog's osteoarthritis.

There's informative materials that I'm sure you have and if not, we can get them for you. And the pet owners involved in the overall plan and the long-term care for their family member, their family pet.

A photograph of a woman with long blonde hair, seen from the side, holding a Jack Russell Terrier dog. The dog is looking towards the left. The background is a soft-focus outdoor setting with trees and sunlight. The image is overlaid with a semi-transparent dark grey box containing text.

FOLLOW-UP

Buddy!

AGE: 8 years • BREED: Jack Russell Terrier

FOLLOW-UP FINDINGS:

- “Wiggle” is less pronounced
- Seems happier and more friendly
- No longer leaning while sitting
- Owners like easy-to-give NSAID and supplements
- Following and enjoying exercise plan

So follow up findings.

We have found that the wiggle is less pronounced. Buddy he seems happier as reported by the owner. Seems happier and is more friendly. We find that he's no longer leaning while he's sitting, and the owners like the easy to give NSAID and the supplements. They are following and enjoying the exercise plan.

FOLLOW-UP

Buddy!

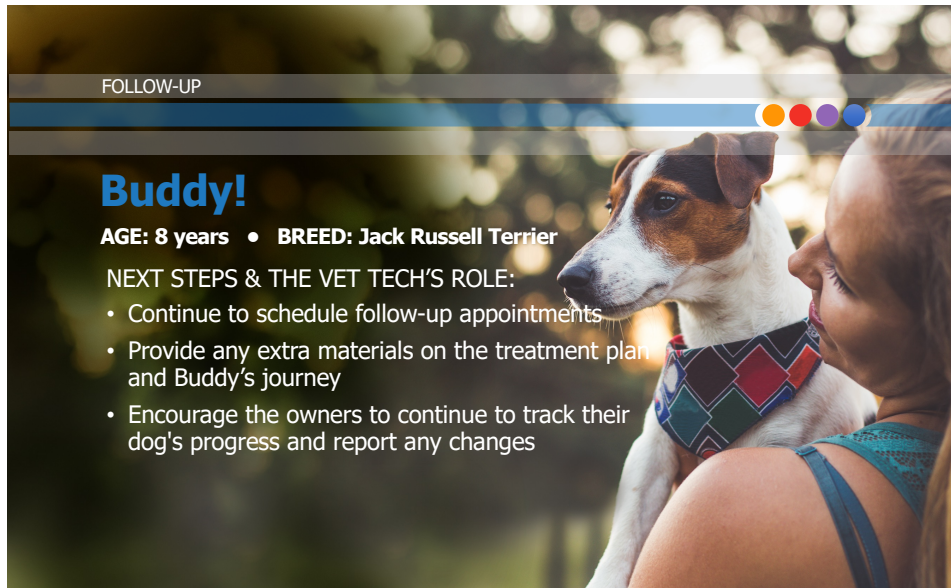
AGE: 8 years • BREED: Jack Russell Terrier

CONVERSATIONS:

- Owners like the easy-to-give NSAIDs and supplements
- Client wants to discuss other diet options
- Are sticking to the exercise plan

“ I feel so much better now! I can run and play and keep up with all my friends again! ”

And Buddy is saying that he feels so much better now. He can run and play and keep up with all his friends again.

A woman with long blonde hair, wearing a teal top, is smiling and looking at a small dog named Buddy. Buddy is a white dog with brown patches, wearing a colorful patterned collar. The background is a soft-focus outdoor setting with greenery and sunlight. The text is overlaid on the left side of the image.

FOLLOW-UP

Buddy!

AGE: 8 years • BREED: Jack Russell Terrier

NEXT STEPS & THE VET TECH'S ROLE:

- Continue to schedule follow-up appointments
- Provide any extra materials on the treatment plan and Buddy's journey
- Encourage the owners to continue to track their dog's progress and report any changes

That's what we got into veterinary medicine for. So we're going to continue to schedule follow-up appointments.

We're going to provide any extra materials on the treatment plan and on Buddy's journey and encourage the owners to continue to track their dog's progress, and most importantly, report any changes or report that things are going well. When we get that report, write it in the medical record.



KEY TAKEAWAYS

1 Be PROACTIVE!

- Recognize the signs of osteoarthritis and educate pet owners
- Be the bridge between the vet and the pet owner
- Use proactive OBSERVATION and CONVERSATION at every stage

So what are some of our key takeaways? Well, if you haven't picked up over the past 45 minutes, we want to be proactive, OA proactive. Pro OA active? Yeah, OK. So we want to recognize the signs of osteoarthritis and educate pet owners. That's our role. We as veterinary technicians can do that.

We want to be the bridge between the veterinarian and the pet owner. The veterinarian makes a recommendation. We're going to educate the pet owner regarding that recommendation and ensure they understand it, accept it, gain commitment. Because then, we will see compliance, and compliance is in the best interests of our patients.

And we want to use proactive observation and conversation at every stage. So think about all the things that we just talked about, and how we can implement those at every stage of osteoarthritis with older dogs, younger dogs, cats, our patients that are coming in.


KEY TAKEAWAYS

2 A multimodal approach is best for OA management

Your observations and conversation with the pet owner help shape the plan.

The diagram illustrates the 'MULTIMODAL MANAGEMENT OF OA' approach. It features a central hub with the text 'MULTIMODAL MANAGEMENT OF OA' and 'OA' in large letters. Five colored circles are connected to this hub, each representing a different management strategy: 'Exercise & Physical Therapy' (green circle with a dog icon), 'Nutrition & Weight Control' (orange circle with a scale icon), 'Joint Health Supplements' (yellow circle with a pill icon), 'Medications (including NSAIDs)' (light green circle with a drop icon), and 'Adjunct Therapy' (teal circle with a person and dog icon).

Another key takeaway is-- and hopefully, we all know this, a multimodal approach is best for osteoarthritis management. Our observations and conversations with the pet owner are going to help shape the plan. And again, that will help us gain compliance and commitment.

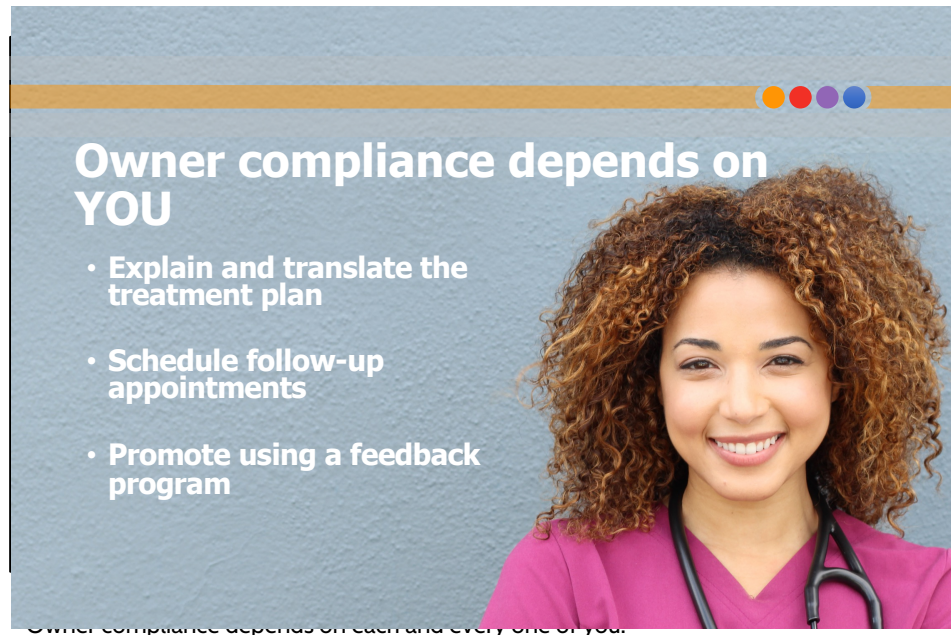


YOU lead the way to early detection

- Observe and converse proactively
- “Own” owner education



So you really lead the way too early detection. We're having the conversation. We are observing proactively. So we as veterinary technicians own owner education.



Owner compliance depends on YOU

- Explain and translate the treatment plan
- Schedule follow-up appointments
- Promote using a feedback program

Owner compliance depends on each and every one of you.

We want to explain and translate, educate the treatment plan. We want to schedule follow-up appointments. Don't forget that. And we want to utilize a feedback program. And with each one of these, every time we talk to a client, every time we get a report back or a feedback or some feedback back from that client, we want to put it into the medical record.

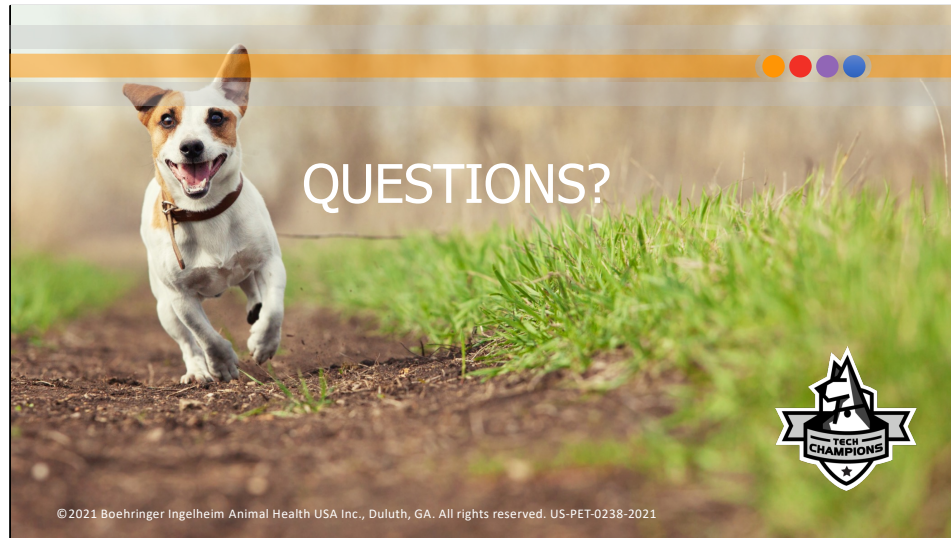


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So I want to thank Boehringer Ingelheim for providing this and Vetcetera for providing this CE. Both are huge proponents of veterinary technicians. The team as a whole, but specifically, veterinary technicians.

Providing education for us as vet techs and supporting our national association, the National Association of Veterinary Technicians in America, which we to be NAVTA



So we don't have a lot of time, but I'm happy to take some questions. And thank you all so much, one, for being here and two, for putting up with me. It truly is an honor for me to speak to you on behalf of Boehringer Ingelheim and Vetcetera. So thank you.

Thanks, Kara. Right now, we don't have any questions. Everybody is saying thank you and that you were awesome as usual. Many thank you is coming in and there's even somebody from Canada.

Yay. [LAUGHTER]

I don't think we thought that there is going to be any opposition from what you say because you have a big, huge fan base, of course. But if there are any questions, please feel free to chime in there. All we're getting is thank yous and this was great.

Let me just look at one here. Just saying thank you again. So I just want to say thank you for taking time to present to us tonight, Kara and BI, for allowing you and supporting us in all of our educational efforts in veterinary medicine, supporting the technicians and the entire team.

Thanks, everyone, for joining us tonight. We hope you enjoyed the presentation. I'm still

not seeing any questions here, so I think we're good to go. And once again, thank you, everybody. Thank you, Kara. Thank you, BI. Thanks to everyone. And we will see you the next time.

All right. Thank you, everyone.

Bye-bye.