

Movement: A Tool to Optimize Your Bladder Cancer Journey

Guest Presenter:

Kirstie Pomaranski, NASM, CPT, CETI- CES



Patricia Rios, BCAN

I want to welcome you again to another Bladder Cancer Advocacy Network patient insight Webinar. Today's webinar topic: Movement, a Tool to Optimize Your Bladder Cancer Journey is brought to you thanks to our generous sponsors, Merck and UroGen. As we go to the next slide, I want to share with you today's topic. From enhanced physical function to improved sleep, the profound benefits of regular exercise and physical activity are undeniable. For bladder cancer patients staying active during and after bladder cancer treatment can impact treatment outcomes and overall, well-being.

Today, I am delighted to welcome Kirstie Pomaranski, certified personal trainer, cancer exercise specialist from the Inova Schar Cancer Institute for an insightful session on how physical activity can optimize our bladder cancer journey. For the next hour, Kirstie will share with us practical strategies for integrating exercise for movement into daily life.

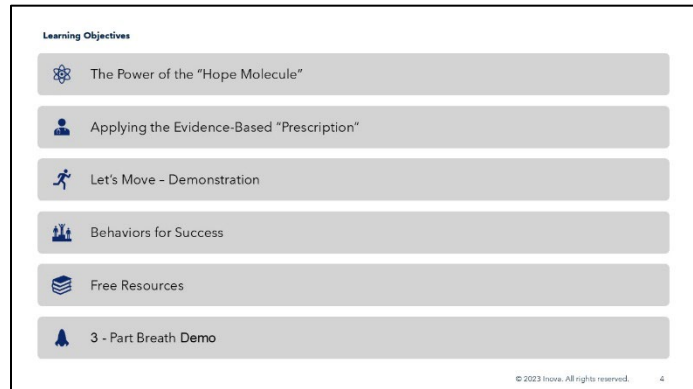
Kirstie currently oversees the exercise program for cancer patients and survivors at Life with Cancer. She's a member and certified by renowned organizations such as the American Council on Exercise, National Academy of Sports Medicine, and Cancer Exercise Training Institute among others. Kirstie is deeply passionate about supporting cancer patients on their journey to recovery and wellness. For more than a decade, she has trained clients individually in the small group settings from the ages of three to 93. She has also conducted live and virtual fitness classes from Inova Well and other organizations in the Northern Virginia area. Kirstie has made it her life's work to help inspire, educate, and empower others to adopt healthy lifestyle changes to optimize their health and well-being.

Kirstie Pomaranski:

Welcome back everybody. I'm hoping you can see my title slide and we're going to advance it to the next kind of learning objectives for tonight for our time together. I want to share with you one of the most profound and motivating videos that I've come across that really does a wonderful job demonstrating why exercise is so important, particularly with a bladder cancer diagnosis and really how it can help impact your physical and mental health and a lot of the other avenues that we'll be diving into tonight.

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We're going to be talking about applying an evidence-based prescription of how we can start with getting more movement throughout our day. I'm going to be demonstrating some particular movement patterns that I think are very helpful in helping maintain muscle mass, bone density balance, improving cognitive functioning and coordination and more. We're going to be talking about behaviors for success when you're getting to started with trying to think about ways to get more movement



throughout your daily life and exploring some resources that we have available that are free along with finishing tonight's practice with diaphragmatic breathing, three-part breathing.

So let me get to the awesome video that just really inspires me and once you know this information, you really can't unknow it, and we'll get into the psychology of how we can work on our mental talk in terms of finding that motivation to get up on the days that we might feel pretty fatigued.

Video: "When you exercise, when you use your muscles, you are giving yourself medicine, and it is medicine you can't access any other way. You can't take a pill that has hope molecules in it. Until this current decade, scientists did not know that your muscles are endocrine organs. So endocrine organs are organs in your body that synthesize and release chemicals into your bloodstream that affect every system of your body. And biologists basically thought muscles were there to use energy to move your bones around in place, but your muscles are actually like a pharmacy in the same way that your adrenal glands or your pituitary gland, your pancreas. Your muscles are this amazing pharmacy that are manufacturing and storing chemicals that have profound effects on your physical and your mental health. And let me just give some examples.

So first of all, they're called myokines. So "myo" means muscle and "kine" means set into motion by, so these chemicals called myokines, they're set into motion by your muscles into your bloodstream where they can travel and affect your heart, your immune system, your brain. So some of them do really important things like help you regulate blood sugar to improve your metabolism and help you use energy. Some of them kill cancer cells when they're in your bloodstream and help your immune system kill cancer cells. Some of them are really important for cardiovascular health and help protect the health of say your blood vessels in your heart. So researchers now think that these chemicals that your muscles produce, these molecules are one of the reasons why all forms of exercise are linked to better physical health and reduced risk of every disease you can imagine. It's all forms of exercise because all forms of exercise engage muscles and your muscles are this pharmacy. So here's the hope molecule thing.

So some of these myokines have their strongest effects on your brain, and they're only released when you contract your muscles. So that's one thing I forgot to mention. Your muscles are not giving up these myokines unless you use them. It's like a rule, you use them and your muscles say, "Okay, I guess you are engaged with life. Let me help you out by giving you all these chemicals that will protect your heart and kill cancer cells and regulate your blood sugar." So you have to move your body basically in order to get the full effect of this pharmacy you have.

So when you exercise your muscles release some chemicals that particularly target your brain. And when they reach your brain in the short term, some of these chemicals immediately act like an anti-anxiety. So to start to suppress fear and stress and worry and increase motivation and actually enhance

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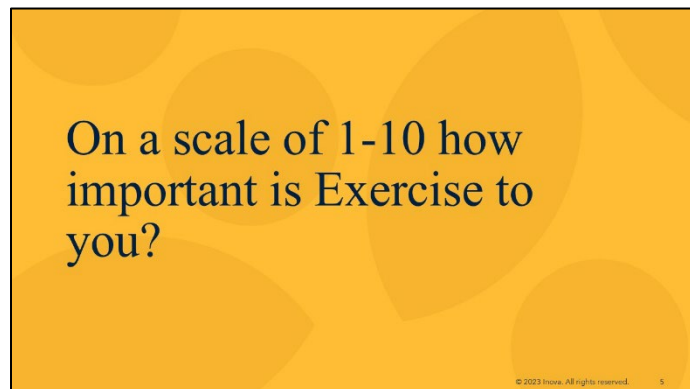
learning as well. So a short-term effect. And in the long term, when your brain is regularly exposed to these chemicals, your brain starts to change in structure and function in ways that make you more resilient to stress. So it literally starts to change the connections between the systems of your brain that help you control your emotions, that help you have a challenge response rather than a fight or flight response to stress. That help you recover from things like depression or grief.

And a study that was published, I think it was maybe 2014, 2015, one of the first studies to look at this, the researchers called them hope molecules because these studies were showing that exercise was preventing trauma-induced depression, that there were literally molecules being released from your muscles that were like an intravenous dose of hope in really difficult circumstances.

So this is the thing I hope that people now, once you know it, you will never unknow, is that when you exercise, when you use your muscles, you are giving yourself medicine, and it is medicine you can't access any other way. You can't take a pill that has hope molecules in it. Not yet anyways. You need to lift something heavy or push something or dance or walk or play sports or garden. As long as you're using your body, your muscles are going to be releasing these chemicals. And again, there are dozens of them and I just happen to love the hope molecules because I do like to think that I'm giving myself an intravenous dose of hope when I exercise."

Kirstie Pomaranski:

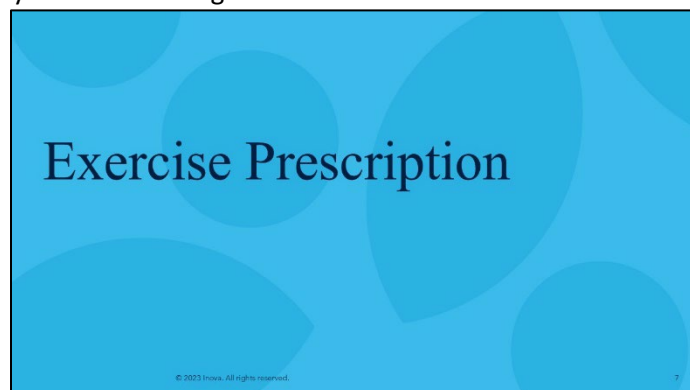
So hearing that, it's really quite profound that we've only learned this in the last 10 years. And so if you guys could just check in with yourself and on a scale of one to 10, ask yourself right now in this very moment, how important is exercise in your life and how confident are you that you can accomplish this on your own? So if you'd like to go ahead and just add that into our chat box, feel free to keep that to yourself or you can add that into our chat.



Kirstie Pomaranski:

All right, so let's talk about how we can translate the awesomeness of what we just heard and learned about as far as the hope molecule into everyday life. And looking at this as movement-based medication, something that you can't get in a pharmacy, something that is free for everyone to use and accessible and ready anytime, which is really amazing if you come to think about it.

We know that the way that exercise works is that everyone in the oncology field is starting to realize this is just as important as a lot of the other medications that are being prescribed and really very helpful as a tool to helping people cope with their diagnosis.




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Kirstie Pomaranski:

So looking at the prescription, it looks very similar to individuals that have a non-cancer diagnosis. This is something that you can do to work up to if you're not physically able to meet these requirements, if you can focus on small bite-sized, attainable movement patterns like getting up and walking, moving your arms, chair dancing, chair yoga. We want to try to get towards this two to three days of functional strength training on a weekly basis and performing activities that support your everyday life. I'll be demonstrating what that looks like in just a few moments and making sure that we are working on consistency over perfection.

Exercise Prescription



2-3 days per week of Strength Training

- movements that support functions of daily living

Daily Mobility Work-Stretching

- Yoga /Tai Chi

~30 Minutes of Moderate Aerobic Activity / 5 days a week

~ 10 mins of Vigorous Activity a day


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So focusing on something that helps you with stress regulation and reduction, balance and mobility that can look like yoga or tai chi or maybe just gentle stretching before you get out of bed in the morning. And we also want to work on our aerobic capacity to be able to walk up flights of stairs, go up hills without feeling winded, and that takes time and practice. And like any practice when you're first getting started, it's going to take a little bit of mental toughness, a little bit of being mindful of the things that we're telling ourselves, establishing a practice of self-compassion because you've been through a lot and you might have a lot of things or barriers to work around. And so focusing on the things that you can do versus focusing on the things that you can't can be a little bit of a mental shift, a mental game that you can play with yourself on helping you get started.

Kirstie Pomaranski:

So looking at this, this is a perfect example of how we can marry modern day technology with a practice of living in our own body and establishing what that feels like. Knowing how hard we can push ourselves but not hurting ourselves. This is about staying in the game and looking at this in terms of your lifespan. Helping you to live a high quality functioning life regardless of your diagnosis. Living independently, maintaining that cognitive functioning that we talked about that the myokines give you. Helping to maintain a healthy body mass composition. We really want to focus on maintaining our muscles because as we age decade by decade, we are losing muscle mass, not to mention bone density.

Moderate and Vigorous Activity - An Exercise In Embodiment



RPE Scale
(Rate of Perceived Exertion)

RPE Scale (Rate of Perceived Exertion)	Description
1	Very Light Activity (anything other than complete rest)
2-3	Light Activity (like the you can maintain for hours, easy to breathe and carry on a conversation)
4-5	Moderate Activity (like the you can maintain for 30-60 minutes, some able to talk and feel some discomfort)
6-7	Vigorous Activity (like the you can maintain for 15-30 minutes, short of breath, can't speak a sentence)
7-8	Very Hard Activity (difficult to maintain, somewhat intensity, hard to speak, able to talk a single word)
10	Max Effort (like impossible to continue, completely out of breath, unable to talk)

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In most cases, you should exercise at a level that feels between **4-5 (moderate) to 6-7 (somewhat heavy)**. When using this rating scale, remember to include if you experience any shortness of breath, as well as how tired your legs feel. We're looking for an overall sense of exertion.

QUICK HEART RATE CALCULATIONS

220-Age = X

Take X multiply by .7

50-70% of Max HR is Moderate
70-80% of Max HR is Vigorous

What is your Max HR?

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So thinking about this in terms of if you are looking at this beautiful colored scale that I have demonstrated on the left, if you think about breaking it down into numbers of one to 10, we want to be working in a zone of four to five. That's moderate in intensity, meaning we should be able to have a conversation but not necessarily sing the words to a song. And we do want to actually get into some areas of vigor in our lives. So that means going up a flight of stairs, getting our bodies to a point where we're having to catch our breath, but not feeling that we are all max effort being chased by a bear. So we want to ride that balance between having 30 minutes of aerobic based moderate activity mixed with

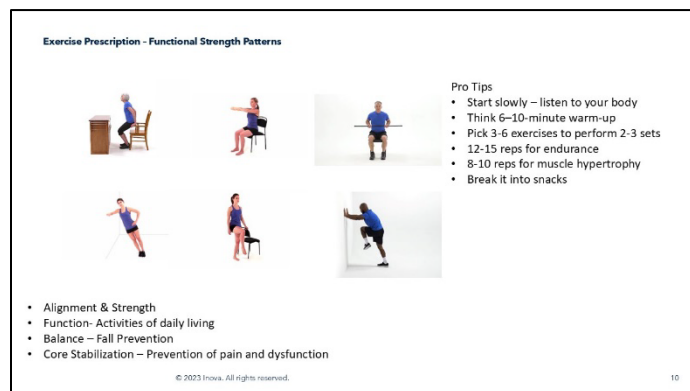
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two to three days a week of strength training, something mobility and stress reduction, and having that little bit of vigor, which helps us in numerous ways primarily reduce our risk of cardiovascular disease by up to 90%.

So you can learn through modern day tool to have a heart rate calculation. You can get instant feedback and learn to mirror this feeling in yourself monitoring, "All right, what is my breathing telling me? What is my respiration? What are my body physical cues telling me? And does this match what my smartwatch devices would be telling us?" So this is a beautiful practice in learning to live in our own body. Many of us have lived in our body for a long time, but we may not have been paying attention to the cues and the signal that it's telling us. So this is a wonderful practice in just becoming more aware and mindful of what's going on with you.

Kirstie Pomaranski:

So when we talk about strength training, this is one of my favorite topics because I love exercise, I love movement, and I really like to think about it in a more friendlier approach, like calling it a movement practice because movement is wonderful, movement is energizing, movement can be playful, and it really is about helping you live a higher quality of life and getting those hope molecules put into your bloodstream. All you need to do is get up and move, dance, perform some light housekeeping. But you can put some intention behind it and work on maintaining muscle mass and bone density.



So these are some examples of some movement patterns that I'll be demonstrating today. As you can see, there are different images of people performing a squat, which is also called a sit to stand, a pushing movement, which I'll demonstrate against a countertop, a pulling movement which strengthens the muscles of our back, something that stabilizes the core, that could be planks against the wall, planks against the countertop, and then advancing that down on the floor depending on what's happening with you.

I also prescribe balance training activities, things that help us with eye gaze stabilization, which helps with being able to sense where you are in space and becoming more confident and grounded in your own physical body. And then things that will help get that heart rate up. And you can see this gentleman is doing some knee raises against the wall.

So some pro tips when you're getting started with a resistance training program. You start slowly and listen to your body, making sure that you have a proper warm up, giving yourself about six to 10 minutes. It could be going for a little walk around the block, it could be knee bends, it could be shoulder circles, and I'll be demonstrating kind of my tools and tricks. I like to start with about three to six of these movement-based patterns that help you climb stairs, go play with your grandchildren, put groceries away, play with your dog, whatever is meaningful to you. I want you to try to pick those activities and movements that will help you stay engaged and strong. So three to six exercises typically, perform about two to three sets and you're going to be looking for a repetition range of about 12 to 15 repetitions.

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A general rule of thumb is if you can lift more than 20 repetitions of a particular exercise, it's a sign that you probably can handle more weight, and you can think about increasing your weight between two and 5%. And you can use various tools like dumbbells, resistance bands, water bottles, books, things that you have around your house just to get started until you are feeling a little bit more confident potentially going into a gym setting or a class setting.

I also recommend, if you're dealing with lots of fatigue and in the midst of treatment, trying to break it into snacks or inserting it around your workday schedule. So if you have a meeting, scheduling time in your calendar, maybe five, 10 minutes, breathing, stretching, some marching in place. It doesn't have to be so complicated, it just has to be that you're establishing that pattern of repetition and attention to giving you the behaviors that will get you started.

When I select exercises, I want you to focus on alignment. So good posture is really important, making sure you're standing with a nice tall spine, your shoulders are pulled back, thinking about you have a string attached to the crown of your head. And I would prefer you to do these exercises in a standing position if possible. If you need to move into a standing or sitting position. You are in charge here and you know your body best and your health history best. So I'm going to let people make that call for themselves.

Again, focusing on activities of daily living, like carrying groceries, rolling suitcases down airports, going up flights of stairs. These are all things that you want to think about in terms of how we would move and strengthen our body so that we can just transition seamlessly into our lives. And then always preventing lower back pain by strengthening your core, that really does help a lot of pain and dysfunction. And again, the goal of these types of movement practices are to stay in the game and prevent injury, not to leave you injured and feeling broken.

Kirstie Pomaranski:

So like any good exercise program, there are some signals that our body sends that we need to pay attention to. If you're going to be starting an exercise program, you should probably check in with your doctor and just make sure that you're communicating to them. They will know medications and your health history best, and will be able to give you some guidance on how you can best navigate some of the things that you might be dealing with in your health journey.

Warning Signs/ Contraindications	
STOP IMMEDIATELY	
Chest pain or pressure	
Development of irregular pulse (irregular heart rate or palpitations)	
Development of resting pulse higher than 100 beats per minute	
Decreased heart rate or blood pressure during increased activity	
Excessive rise in blood pressure	
Recurring leg pain or cramps	
Sudden shortness of breath, muscular weakness, or tiredness	
Sudden onset of nausea	
Blurred vision, dizziness, faintness, or lightheadedness	
Vomiting or diarrhea within the previous 24 to 36 hours	
Disorientation or confusion	
Pallor (paleness) or cyanosis (bluish skin)	
Fever	

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I always listen to chest pain and pressure that's generally assigned that that's not something good that you want to push past. Pulse, paying attention to heart rate monitors, developing a higher fast rate of a pulse more than a hundred beats a minute is usually an indication that you're in trouble and you need to check in with the urgent care or ER. Monitoring your blood pressure is a good idea because as we age, these are metrics that help us gauge if we are in a good and healthy place.

And it's about knowing what's happening in your body and having those conversations with your care team. Reoccurring leg pains or cramps that can be problematic for many reasons, blood clots, things like that. And you just don't want to push past these warning signs. You're never going to want to exercise with a fever or if you're experiencing any vomiting or diarrhea, that's maybe a time where you just want

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to kind of ease back, be compassionate with yourself, making sure you're getting rest and proper nutrition and then try it again tomorrow. You can always go for short walks and just play it by ear.

