

Active Living with Arthritis Podcast #11

Doing What You Love: Gardening, Golf, and Tennis when Living with Knee Osteoarthritis

Karen: Welcome to another Active Living with Arthritis podcast, presented by ENACT center at Boston University as part of our Interact with ENACT series. We're here to bring you evidence-based information related to arthritis and rehabilitation. I'm Dr. Karen Jacobs, an Occupational Therapist, and a professor in occupational therapy at Boston University, and I'm also your host for this podcast. I'm happy to be speaking with Amber Steckel and Kaitlin Thompson, candidates for the Doctor of Physical Therapy degree at Boston University. Thank you both for being here! Today, we'll be discussing common social and leisure activities, and some modifications that can be made for people with knee osteoarthritis to make these activities less painful.

As you know, exercising is great for your physical health, but it can also help with emotional well-being. It's important to find time to do activities that you like to do. First, we'll start with gardening. Amber, what kinds of tasks associated with gardening may be painful for people with knee osteoarthritis, otherwise known as knee OA?

Amber: To start, gardening often requires someone to be kneeling and bent over with poor posture for a prolonged period of time. Kneeling can be especially painful for people with knee arthritis. One suggestion when kneeling is to wear knee pads or kneel on a pillow or soft surface to cushion the knees. If that is still painful, you can also try sitting on a small stool. If you don't have a stool, you could also try sitting on a milk crate. The key when sitting on a stool or milk crate, is to bend forward at your hips and keep your back straight while gardening.

Karen: I've actually seen those pads and stools in stores, and actually have tried them too. Kaitlin, do you have any suggestions for someone who doesn't want to kneel, or for someone can't get up and off a low stool.

Kaitlin: Yes, to avoid getting low to the ground altogether, you might consider investing in raised flower beds. These can either be large wooden box structures that are built directly on the ground, or smaller wooden boxes raised on legs, almost like a table. They come in other materials besides wood if you prefer a different look, and they come in various heights, ranging from a couple feet off the ground, to several feet off the ground. As you can see, there are a lot of options. While there *is* a cost to purchase and install the materials, it may be worth it for you. It's a great way to protect your joints with arthritis and still engage in an activity that can bring you lots of joy.

Karen: I love gardening, and these are great ideas. You mentioned one problem for gardeners is staying in positions of poor posture for long periods of time. Amber, do you also have tips for how to avoid *this* aspect of gardening?

Amber: Yes, a great thing to do is to keep changing your position and moving around. Because of the changes in the joint tissues caused by arthritis, joints get stiff and painful if they are kept in one position for too long. Moving around every 20 minutes or so can help keep the stiffness to a minimum. Another idea is to rotate your activities, like planting, watering, and trimming, so that you're changing positions frequently.

Karen: Great, thanks for those ideas! Kaitlin, gardening can often require heavy lifting, for example carrying large bags of soil or mulch. Can't this be difficult and painful for people with knee OA?

Kaitlin: Yes, you're absolutely right about that. Carrying heavy objects puts more force through the knees which can be especially painful for someone with knee osteoarthritis. There are a couple ways you can help reduce the stress on your joints when carrying loads. One way is to break up the load into multiple trips. To do this, you can scoop some mulch or soil into a smaller bag or container and move that several times. As Amber just talked about, you can also break up these trips by doing other gardening activities in between. The variety in activities can help prevent doing any one motion

or holding one posture for too long. Another great thing you can do is use a wheelbarrow, wagon, or hand-truck to transport these loads. In the end, you are the one who knows your symptoms, and it may be a combination of these strategies that works best for you.

Karen: That's a great point – different strategies may work better for different people. Thanks for those great suggestions. Now, let's move on to another common leisure activity. Another thing many people enjoy is golf! However, some aspects of golf may be painful for someone with knee OA. Amber, what kinds of modifications would you suggest for someone with knee OA?

Amber: Two of the most problematic things about golf are carrying the golf bag and walking the whole distance of the course. Carrying a heavy golf bag puts a lot of force through your joints with each step. Lighter golf bags range from about 5-7 pounds, so depending on how much you carry with you, a typical bag can weigh anywhere from 10-30 pounds. Studies show that every 1 pound of force carried is actually *four* pounds of force through your knees! That means if your bag weighs 10 pounds at *minimum*, there are an extra 40 pounds of force on your knees – and with a 30 pound bag, we're talking about 120 pounds of extra force through your knees! A second challenge for people with knee OA is walking long distances. Imagine carrying these heavy loads for 18 holes. This creates repetitive stress on the joints and the combination of carrying heavy loads and walking long distances can lead to pain and swelling of the joints at the end of the round. One of the easiest ways to reduce both of these stresses on your joints is to use a golf cart. Not only does it reduce the amount of walking you must do, it also prevents you from having to carry the bag.

Karen: Wow, when you spell out those numbers like that, it's a lot easier to understand why carrying heavy things has such a big impact on your joints. Kaitlin, what about people who really *enjoy* walking the course as a way to get exercise?

Kaitlin: I'm glad you brought that up, Karen. Walking is great form of exercise for people with all types of arthritis. If you like to get your exercise from walking the golf course, there are other strategies you can use. One option is to use a pull-cart or a bag on wheels, which allows you to walk without carrying your bag. If pulling the bag behind you is uncomfortable, you might want to try pushing it in front of you instead. Another option is to only use the golf cart for half the round, and a pull-cart the other half, so you are still getting exercise. Lastly, you can also choose to golf only 9 holes instead of the full 18, allowing you to still do the activity you enjoy without overdoing it. Amber, did you have anything else to add?

Amber: Yes, I just want to comment on the repetitive bending down and standing back up that's required to pick up your golf ball and put it back down on the ground over and over. This can be very painful for someone with knee OA. Using a golf ball retriever or ball pick-up device prevents you from having to squat down to get the ball every time. You can buy these at most sporting goods stores and they're great for helping you avoid an activity that can be really painful on your knees.

Karen: These are some great tips for our listeners that love to golf! Now for our last social and leisure activity: tennis. Tennis involves running, changing directions quickly, and reaching, all while in an athletic stance. I imagine this would create a lot of stress on the joints and would be quite painful to someone with knee OA. Kaitlin, would you even recommend tennis as a form of exercise for people with knee OA?

Kaitlin: That's a good question, Karen. Tennis can involve lots of jumping, twisting, and turning, as you described. These movements are challenging for someone knee OA. In particular, the side to side movements can put too much shear force through the joints, a type of force that causes friction on the joint surfaces and can damage both healthy *and* arthritic joints. On the other hand, it's really important for people with arthritis to stay active and if tennis is something people like to do, there are some changes that can be made to make it safer for the joints.

Karen: That's really interesting, and I appreciate you clarifying it. Amber, what are some things that can be done to help make tennis safe for people?

Amber: Well, first, we highly recommend that you play doubles rather than singles. This reduces the amount of side-to-side movement that you have to do, as well as overall running and work required to play. You can also accomplish this by playing on just half of the court rather than a full court. Another tip when practicing is to only practice one type of shot a time. What I mean by that is, instead of rallying back and forth, first focus on hitting down the line with your partner, then cross court, then volleys, and so on. This will allow you to still play and improve your technique, while greatly reducing the amount of running, pivoting, and shuffling you have to do. One last thing to consider is the playing surface. Clay or grass courts are better for your joints than hard cement or asphalt courts. While there may be an extra cost for these courts, it can really make a difference with how your knees feel.

Karen: Those are some good suggestions. However, I know from personal experience that even playing doubles can still be pretty tiring. Kaitlin, how often should I take a break?

Kaitlin: That's a good question, and the bottom line is you should take breaks whenever you need to for your joints. It's really important to listen to your body and change the activity when needed. In tennis, a great time to take breaks is between games and sets. Pacing yourself early on will allow you to play for a longer time. During these breaks, you can sit down for a couple minutes, which will take the load off your knees for a moment. This won't reduce the overall impact the tennis match has on your knees, however, briefly unloading your joints may provide you some temporary pain relief. This can also be a good opportunity to stretch your muscles. Many people with knee OA develop tight muscles, especially their calves, hamstrings, quadriceps, and hip flexors. When stretching, go until you start to feel a slight pull and hold your position for at least 20-30 seconds to get an effective stretch. Your stretch should never be painful. We've put a link

on the ENACT website for instructions and pictures of how to properly stretch these muscles.

Karen: Breaks are really helpful. I'd also like to mention that we have made general recommendations for all of these activities. As I mentioned before, different things may work best for different people. You may want to consult your doctor or physical therapist or occupational therapist for recommendations that are specific to you. Thank you, Amber and Kaitlin, for all the great suggestions you've provided today. It's good to know that living with arthritis doesn't always mean quitting the activities you enjoy most. I'd like to also thank you for listening! Please feel free to email us at ENACT@bu.edu if you have questions or concerns about other sports and leisure activities that we did not discuss today. We'd also love to hear from you, and if you have any feedback or would like to tell us about other topics you're interested in. Visit our website, www.bu.edu/enact, to learn more about ENACT, these podcast series, and our online resources. Until next time, stay active and keep doing what you love!