Can You Really Improve Your Posture with Osteoporosis? A Case Study | Dr. Claudia Tamas Transcript

(Transcripts are generated by AI and may contain errors)

Introduction

Have you ever seen a Have you ever seen a photo of yourself and thought, " When did I start When did I start slouching?" Or slouching?" Or maybe you've noticed maybe you've noticed your back and shoulders are your back and shoulders are rounding and rounding and wondered, wondered, wondered, "Is there anything I can do about it "Is there anything I can do about it?" Most?" Most people think that people think that posture is simply posture is simply about about about standing straighter or standing straighter or looking better. But looking better. But in reality, posture in reality, posture affects much affects much more than more than just your just your appearance. It has a appearance. It has a big impact on your big impact on your bones and overall bones and overall health. The good health. The good news is that it's news is that it's never too late never too late to improve your to improve your posture, and that's exactly what posture, and that's exactly what we'll talk about in this we'll talk about in this episode. Today I am episode. Today I am joined by joined by two wonderful guests.

two wonderful guests. First up is Dr. First up is Dr. Claudia Tamas, a Claudia Tamas, a physical therapist, physical therapist, nurse, nurse, nurse, strength and strength and conditioning specialist conditioning specialist conditioning specialist, the first Onro Method specialist in the United States, my own Onro Method specialist in the United States, my own Onro instructor, and a Onro instructor, and a certified certified bone health practitioner. She bone health practitioner. She has helped has helped has helped countless countless countless people people people improve their posture, improve their posture, move with more move with more confidence, and confidence, and strengthen their bones.

strengthen their bones. Also with us is Ruth Also with us is Ruth McCarty. Ruth McCarty. Ruth worked for 20 years worked for 20 years at AT&T and was also a at AT&T and was also a member of the local member of the local school board.

school board. Today, she Today, she will share her will share her inspiring story of inspiring story of posture transformation. You will see posture transformation. You will see what can be achieved what can be achieved with the right with the right guidance and guidance and consistent consistent consistent training. So, in training. So, in this episode, you'll this episode, you'll learn why learn why posture is so important, posture is so important, how it affects how it affects your bones, your bones, balance and balance and health, and health, and hear hear hear Ruth's inspiring transformation story.

Ruth's inspiring transformation story. Stay with us until Stay with us until the end because Dr. the end because Dr. Claudia Claudia Claudia will demonstrate four will demonstrate four simple and effective simple and effective posture exercises posture exercises that you can start that you can start doing today— it will be very it will be very informative.

informative. informative. Stay with us. Congratulations, Dr. Congratulations, Dr. Claudius, congratulations, Ruth. I am Claudius, congratulations, Ruth. I am very, very happy. We've been discussing been discussing the making of this the making of this episode for so long, and it's episode for so long, and it's finally here. So, finally here. So, welcome.

welcome. welcome. Thank you. Thank you. Thank you, Margie. Thank you, Margie. It's nice to be here. It's nice to be here. Good. So, how Good. So, how will this work: we will this work: we will start with a short will start with a short presentation by Dr.

presentation by Dr. Claudia, because sometimes it is Claudia, because sometimes it is useful to see everything useful to see everything visually and get a visually and get a basic understanding basic understanding of why we are all so of why we are all so passionate about this topic passionate about this topic and why it is so important.

So let's start with So let's start with Dr. Dr. Dr. Claudia's presentation. Ruth Claudia's presentation. Ruth will then share her will then share her story, and I believe story, and I believe she is an example she is an example for many. Ruth, you for many. Ruth, you inspire me, you have inspire me, you have worked hard and the worked hard and the results are simply results are simply incredible, I do incredible, I do n't think people even n't think people even realise it is realise it is possible. I'm so excited, possible. I'm so excited, then Dr.

then Dr. Claudia and I will chat for a bit Claudia and I will chat for a bit, and, and after that she after that she will show us all will show us all four exercises that four exercises that can significantly can significantly improve your improve your posture and are easy posture and are easy to do.

to do. Many Many Many interesting things await us. So, I'll interesting things await us. So, I'll give it to you, give it to you, Dr. Claudia, you Dr. Claudia, you can show can show your slides. I am very your slides.

Dr. Claudiau2019s posture presentation and key concepts

I am very happy to share this happy to share this information today. You know, Margie, I. You know, Margie, I always look at always look at posture holistically.

posture holistically. It's not just about It's not just about observing, it's not observing, it's not just about just about standing tall or standing tall or looking confident.

looking confident. It is a living, dynamic It is a living, dynamic indicator of indicator of how well our how well our body is functioning body is functioning from the inside. It's even from the inside. It's even a story a story our skeleton our skeleton tells about our tells about our nervous system, nervous system, circulation, digestion, circulation, digestion, and even and even pelvic health. And ultimately, I pelvic health. And ultimately, I view it as an view it as an indicator of the overall indicator of the overall resilience of the body.

resilience of the body. Therefore, when our Therefore, when our posture changes, posture changes, it is never just an it is never just an aesthetic shift. This is a kind of. This is a kind of structural structural structural message. Our message. Our body says that body says that something is adapting, something is adapting, something is compensating, something is compensating, maybe there is a problem with something maybe there is a problem with something. So when we,. So when we, as clinicians, as clinicians, learn to read these learn to read these messages, we messages, we gain insight gain insight and access to one of the and access to one of the most powerful most powerful early early early warning systems for warning systems for whole- whole- whole- body health. So today I body health. So today I hope to move hope to move beyond the old beyond the old notion of "just notion of "just sit up straight," and we'll sit up straight," and we'll explore posture as a explore posture as a diagnostic lens, a diagnostic lens, a window into how window into how our architecture our architecture supports every supports every system that keeps system that keeps us alive, us alive, energized, and energized, and healthy. Here's what I healthy. Here's what I have planned for have planned for today. I hope today. I hope I can convincingly I can convincingly convey the importance of convey the importance of optimal optimal optimal skeletal skeletal skeletal alignment and what alignment and what it means. What does it it means. What does it look like?

look like? Posture analysis and Posture analysis and the most common the most common the most common posture deviations. posture deviations. Today I will Today I will focus on focus on one very one very specific specific specific postural deviation postural deviation that is of greatest concern to that is of greatest concern to my patient group and my patient group and is the most common.

is the most common. Then about its impact Then about its impact on overall on overall health and long-term health long-term health… Ruth will join us next.

Ruth will join us next. She is my amazing She is my amazing patient. It's a patient. It's a great honor for me to have her great honor for me to have her on our program. Ruth on our program. Ruth is part of our is part of our Oniro program and she Oniro program and she will share her will share her story. It's very story. It's very impressive and inspiring, impressive and inspiring, and then we'll share and then we'll share some some some posture exercises to give posture exercises to give you an idea of you an idea of where to start this where to start this process. So what

is process. So what is optimal posture?

Optimal posture, Optimal posture, when we discuss when we discuss this concept, we this concept, we mean a harmonious mean a harmonious connection between muscles, connection between muscles, bones, and the nervous bones, and the nervous system. This is the position system. This is the position in which we have in which we have the least tension, the least tension, that is, the minimum that is, the minimum load on the load on the musculoskeletal musculoskeletal musculoskeletal system. This is the most system. This is the most efficient and efficient and rational rational rational position, which also position, which also allows every allows every organ in our body organ in our body to function to function to function at its best. So, there are at its best. So, there are two ways we two ways we assess posture.

assess posture. One is static. This is One is static. This is shown in shown in the picture right here on the the picture right here on the slide. And there is also a slide. And there is also a dynamic assessment. And dynamic assessment. And this is one of my this is one of my favorite ways to favorite ways to assess assess assess patients' posture in dynamics.

patients' posture in dynamics. This means I can This means I can watch my watch my patient walk from their patient walk from their car to the clinic. I car to the clinic. I can observe can observe their movements in their movements in functional functional functional positions such as positions such as squats, pull-ups, squats, pull-ups, lowering to the floor, lowering to the floor, lifting an object, and lifting an object, and also during also during weight-bearing exercises. Both of these weight-bearing exercises. Both of these assessment methods are assessment methods are critical critical critical to functionality. On this. On this particular slide, particular slide, we depict we depict posture assessment in statics.

So we look at the So we look at the body at rest, and body at rest, and I use a I use a program called program called Posture Pro, but it doesn't have to Posture Pro, but it doesn't have to be be be anything complicated. We anything complicated. We can certainly can certainly conduct a visual conduct a visual inspection during a inspection during a posture assessment. This particular posture assessment. This particular program connects program connects some important some important landmarks for landmarks for determining posture.

The center of the ear, the center of The center of the ear, the center of the shoulder, the center of the hip, the the shoulder, the center of the hip, the center of the knee, and then the center of the knee, and then the ankle, and compares them ankle, and compares them to the vertical to the vertical line of the temple. This line of the temple. This will be the line will be the line of gravity. So the of gravity. So the further we deviate further we deviate from this from this vertical line, vertical line, the greater the the greater the postural disturbance. In postural disturbance. In this case, we this case, we have an example of have an example of optimal posture.

optimal posture. We only see here, I don't We only see here, I don't know if it's clearly know if it's clearly visible, four degrees of visible, four degrees of deviation in the position of the deviation in the position of the head. That is, the head head. That is, the head has shifted four has shifted four degrees forward from the degrees forward from the vertical line, and vertical line, and this is acceptable.

this is acceptable. We consider anything less than 5 degrees to be We consider anything less than 5 degrees to be optimal optimal. This is an example of. This is an example of optimal posture.

optimal posture. This is a side view. In This is a side view. In addition, we also addition, we also assess the posture from assess the posture from the front.

the front. Anterior assessment reveals Anterior assessment reveals side-to- side-to- side-to- side deviation. For example, you side deviation. For example, you will see if one will see if one hip is higher than the other, hip is higher than the other, if one shoulder is higher than the if one shoulder is higher than the other, or if there is a tilt of the other, or if there is a tilt of the head. For the work head. For the work we do in the we do in the clinic with the clinic with the elderly, the most elderly, the most important and significant important and significant postural disorder is postural disorder is hyperkyphotic hyperkyphotic hyperkyphotic posture. So, what does this posture. So, what does this mean? This is a very mean? This is a very common deviation common deviation in which the head

in which the head shifts forward. This shifts forward. This is called " head-forward posture." And as you head-forward posture." And as you can see here in the figure, where the, where the red line is shown, we red line is shown, we see see see high loads as a result.

high loads as a result. That's what the That's what the red line represents. High red line represents. High loads on the loads on the cervical spine cervical spine and thoracic spine, and thoracic spine, i.e. our middle i.e. our middle back. I'm back. I'm going to talk a little going to talk a little more more more about about about normal posture.

Here on the left we have a Here on the left we have a green line, which green line, which means proper means proper posture alignment. We see a. We see a spine in a spine in a neutral neutral neutral position with a lordosis position with a lordosis in the lumbar in the lumbar region, a kyphosis or region, a kyphosis or curvature in the thoracic curvature in the thoracic region, and then region, and then another lordosis in the another lordosis in the cervical region—this is what cervical region—this is what we consider we consider neutral. So, neutral. So, kyphosis exists in the kyphosis exists in the thoracic thoracic thoracic spine. However, when spine. However, when it is exacerbated it is exacerbated by the by the head being tilted forward, we head being tilted forward, we call it call it hyperkyphosis. This hyperkyphosis. This situation creates a situation creates a significant load significant load on this area, the thoracic on this area, the thoracic and cervical vertebrae, which and cervical vertebrae, which leads to leads to many consequences.

Some of them have Some of them have consequences in the form of consequences in the form of vertebral fractures vertebral fractures or compression or compression fractures, which I fractures, which I will talk about later in will talk about later in my presentation.

my presentation. Another important thing to Another important thing to note here note here with this deviation with this deviation is that the rib is that the rib cage, which is connected cage, which is connected to the thoracic to the thoracic spine, has now spine, has now shifted forward, and shifted forward, and this will affect this will affect the position of the organs the position of the organs that are supposed to be that are supposed to be protected by the skeleton; and protected by the skeleton; and now, unfortunately, the very now, unfortunately, the very structure structure structure designed to designed to protect them is becoming protect them is becoming their prison.

So here we see the So here we see the lungs, right? lungs, right? The lungs are mobile The lungs are mobile organs. We need organs. We need space for our space for our lungs to expand lungs to expand in order to breathe in air.

in order to breathe in air. The heart is also here. It is The heart is also here. It is also a mobile organ. And as you can see in And as you can see in this image, these this image, these organs, they're all very organs, they're all very tightly packed here.

So there is almost no room for any displacement any displacement. However, when we. However, when we have postural have postural changes, we see changes, we see transformations that transformations that affect each affect each individual organ and its individual organ and its function, and this is even more function, and this is even more critical. So, what do critical. So, what do we see? This is an we see? This is an image that I image that I show often, and we show often, and we use it use it in our clinic to in our clinic to demonstrate demonstrate demonstrate how significant how significant these postural these postural changes are. In the first changes are. In the first picture here we see the picture here we see the optimal posture with optimal posture with the head the head positioned directly positioned directly above the shoulders.

above the shoulders. Lumbar lordosis Lumbar lordosis is preserved. The pelvis is is preserved. The pelvis is level and in the level and in the correct correct correct position. And then in the position. And then in the second image second image we notice how there we notice how there are are are subtle changes due to the forward head movement. Immediately, forward head movement. Immediately, shifting the head shifting the head forward creates a forward creates a load on the load on the thoracic thoracic thoracic spine. So we see spine. So we see this this this roundness emerging. The roundness emerging. The chest here gradually chest here gradually descends onto descends onto the lungs, pushing the the lungs, pushing the abdominal organs abdominal organs forward. So forward. So we see the appearance of this we see the appearance of this protruding belly, and protruding belly,

and that's the first sign that's the first sign that the rib cage that the rib cage has dropped and these has dropped and these organs have no room, so they're forced to, so they're forced to protrude outward.

So that's another sign, So that's another sign, and now we move on and now we move on to the third picture, to the third picture, where we see significant where we see significant changes in changes in head position and significant head position and significant changes in thoracic changes in thoracic curvature. This is a curvature. This is a hyperkyphotic condition hyperkyphotic condition with possible pre- with possible pre- existing fractures.

existing fractures. Look where the Look where the lungs are lungs are here. Truth? So, here. Truth? So, they are completely they are completely pushed back.

pushed back. Truth? So the vital Truth? So the vital capacity of the lungs here capacity of the lungs here is reduced, probably is reduced, probably by almost 50% in this by almost 50% in this person. And I keep person. And I keep repeating this because repeating this because it's an extremely it's an extremely important message to important message to understand. In a person understand. In a person with reduced vital with reduced vital capacity, we capacity, we observe observe observe high levels of high levels of mortality and mortality and morbidity. This has morbidity. This has already been studied. We already been studied. We know this is know this is reality, but we reality, but we don't give this don't give this attitude the importance it deserves.

attitude the importance it deserves. Here we see how the Here we see how the abdominal organs abdominal organs shift shift shift even further forward, and even further forward, and the load the load the load is directed downward. Although not. Although not shown here, shown here, stress stress stress is transferred to the is transferred to the pelvic floor and pelvic floor and pelvic organs, which is pelvic organs, which is associated with associated with pelvic pelvic pelvic floor dysfunction, urinary incontinence, and, and bladder and bladder and bowel prolapse. So, bowel prolapse. So, again, again, again, look at how tightly look at how tightly packed these organs are, packed these organs are, and we can't and we can't afford to afford to shift, change, shift, change, or narrow that or narrow that space any further, because space any further, because they're going to have to they're going to have to adapt as they adapt as they move forward. I would move forward. I would say that the most say that the most striking changes striking changes occur occur occur here, since these here, since these organs cannot organs cannot go beyond the go beyond the chest. Therefore, we chest. Therefore, we only see a significant only see a significant decrease in their decrease in their function. So to function. So to solve this problem solve this problem that affects the that affects the whole body, we whole body, we break it down into break it down into parts. In the clinic, we parts. In the clinic, we divide it into divide it into upper and lower upper and lower parts. Sounds parts. Sounds dramatic: dramatic: dramatic: upper and upper and lower "shell" syndrome.

This only shows This only shows us the presence of us the presence of compensatory changes compensatory changes in the muscles that in the muscles that support support support the architecture of the spine.

the architecture of the spine. One important One important feature of muscles feature of muscles is that is that they they they work best at a certain work best at a certain length. Our muscles are length. Our muscles are weakest when they are weakest when they are stretched or when stretched or when they are contracted. In they are contracted. In this case, you this case, you will notice that the muscles will notice that the muscles of the front of of the front of the neck, namely the cervical the neck, namely the cervical flexors, are flexors, are in a stretched in a stretched position. They are position. They are stretched, and the muscles of the stretched, and the muscles of the back of the neck back of the neck are in a are in a contracted contracted contracted position. In addition, position. In addition, pushing the head pushing the head forward places forward places a lot of strain a lot of strain on the thoracic on the thoracic spine and neck. So, spine and neck. So, we have a situation we have a situation where there is a high where there is a high mechanical mechanical mechanical load on the load on the spine, but we spine, but we don't have enough don't have enough functional functional functional muscles to muscles to support it and support it and respond to this respond to this demand. This is a very demand. This is a very problematic situation problematic situation that, over time, that, over time, leads to leads to tissue destruction and the tissue destruction and the compensatory compensatory compensatory changes that we saw in the changes that we saw in the diagram earlier. Therefore, a diagram earlier. Therefore, a qualified qualified qualified clinician will assess this clinician will assess this posture and posture and properly work each properly work each muscle group to muscle group to restore restore restore muscle fiber length and muscle fiber length and stabilize the upper stabilize

the upper body. That's how body. That's how we break it down, and the same thing we break it down, and the same thing we do we do for the lower for the lower body. We have body. We have tight and weak tight and weak muscles for the same muscles for the same reason. Some of them are reason. Some of them are stretched, and some are shortened. So the exercises we we we use are use are aimed at aimed at addressing these addressing these specific deficits specific deficits in muscle function. I in muscle function. I love love love using this using this image when image when working with patients. It's working with patients. It's very helpful to think of very helpful to think of the spine as a mechanism made of the spine as a mechanism made of gears, and gears, and here we see the pelvis here we see the pelvis tilted back, the tilted back, the sternum lowered, right?

So, the chin is up So, the chin is up and and and forward, and we're forward, and we're going to do the going to do the opposite. opposite. opposite. I usually advise patients I usually advise patients to start with the neck, to start with the neck, pulling the chin pulling the chin back and up, and then the back and up, and then the spine seems to spine seems to straighten out, as if you were straighten out, as if you were straightening a mechanism straightening a mechanism with gears with gears. This is an. This is an image that was image that was shared with me at the shared with me at the bone clinic bone clinic when I was starting when I was starting the neuro program, and it's the neuro program, and it's one of the results one of the results that struck me that struck me the most. So, we the most. So, we see that in this see that in this picture there is a person with a picture there is a person with a pronounced thoracic pronounced thoracic kyphosis of 47 degrees.

kyphosis of 47 degrees. They measure it They measure it a little differently than I do with an a little differently than I do with an inclinometer. And this is a inclinometer. And this is a person who person who does does does weightlifting, as we weightlifting, as we do to do to stimulate muscles stimulate muscles called the called the called the back extensors. These are back extensors. These are just some of the muscles just some of the muscles included in this included in this group, and you can group, and you can see how see how obvious it is. This shows obvious it is. This shows how much these muscles how much these muscles support support support the architecture of the spine.

the architecture of the spine. These are the muscles that These are the muscles that hold the spine in an hold the spine in an upright upright upright position. And here we position. And here we see the difference in this person's kyphotic posture over the course of this person's kyphotic posture over the course of months. And this is only months. And this is only due to due to weight lifting and stimulation of the back extensor mechanism. And that makes back extensor mechanism. And that makes me emphasize me emphasize this even more this even more because we use because we use heavy weights at O'N. It is critical that the critical that the process be process be supervised by a specialist supervised by a specialist who truly understands who truly understands how to stimulate this spinal extension moment without creating a spinal extension moment without creating a flexion force that flexion force that is breaking. Hmm, that's is breaking. Hmm, that's very effective. We do not very effective. We do not avoid avoid avoid weight lifting when we have weight lifting when we have patients with patients with hyperkyphosis and hyperkyphosis and osteoporosis, but we osteoporosis, but we need clinical need clinical supervision of these movements supervision of these movements and constant and constant monitoring of spinal extension monitoring of spinal extension movement movement movement. Here are some. Here are some statistics. If you're statistics. If you're not already convinced not already convinced that posture is important, that posture is important, about 80% of adults, I would say even, I would say even more, experience more, experience long-term long-term musculoskeletal pain. And you musculoskeletal pain. And you can understand can understand why the spine, muscles, why the spine, muscles, and ligaments are under and ligaments are under such a heavy such a heavy load. Hmm, load. Hmm, I like this I like this image. The head image. The head weighs about the same as a bowling ball.

So, if you could imagine, if you held a, if you held a bowling ball in your hand bowling ball in your hand all day while you were all day while you were awake, right? How do we awake, right? How do we hold our heads, where would hold our heads, where would you hold them? You wouldn't you hold them? You wouldn't hold her in front of you hold her in front of you with your with your arms outstretched, would you? You would arms outstretched, would you? You would hold it close to your hold it close to your body because the further body because the further we move an we move an object, the heavier object, the heavier it becomes due to a phenomenon it becomes due to a phenomenon called the called the lever arm. This is what lever arm. This is what happens when the happens when the head shifts head shifts forward. We are seeing an forward. We are seeing an increase in forces increase in

forces acting on this acting on this spinal axis, affecting the spinal axis, affecting the muscular and skeletal muscular and skeletal structure, structure, structure, leading to leading to tissue breakdown and tissue breakdown and long-term pain. 30% loss of lung loss of lung capacity—that's capacity—that's capacity—that's serious again, isn't serious again, isn't it? Lung capacity it? Lung capacity correlates with high correlates with high mortality and mortality and morbidity. When morbidity. When I was studying the statistics of I was studying the statistics of hip fractures, I hip fractures, I noticed that the noticed that the recovery rates were very low, recovery rates were very low, and I had to ask myself and I had to ask myself why, because a why, because a fracture alone is fracture alone is not enough for not enough for a person to die within the a person to die within the first year. But first year. But when we look at when we look at all the all the organ fragility that has occurred organ fragility that has occurred due to these postural due to these postural changes, it explains changes, it explains why these patients why these patients cannot recover. So cannot recover. So we've actually put together we've actually put together some pretty some pretty new research here. I new research here. I was glad to find them, was glad to find them, because they because they emphasize that emphasize that hyperkyphotic hyperkyphotic hyperkyphotic posture, regardless posture, regardless of bone density, is of bone density, is associated with associated with fractures, fractures, fractures, falls, and falls, and premature premature premature mortality. Here are mortality. Here are some studies.

some studies. All of them were All of them were conducted within the conducted within the last five years. last five years. So, fairly new. So, fairly new.

Severe kyphotic Severe kyphotic posture is associated with a posture is associated with a 99% increase in mortality in 99% increase in mortality in adults living adults living in communities.

in communities. The observation The observation The observation lasted for six years, lasted for six years, regardless of age, regardless of age, BMI, and BMI, and comorbidities. Here, in comorbidities. Here, in the second study, the second study, they studied about they studied about 3,000 men. They 3,000 men. They looked at increasing looked at increasing severity of kyphosis and severity of kyphosis and noted that it was noted that it was associated with associated with increased increased increased overall mortality. And now you understand why I emphasize so much why I emphasize so much on the impact on organs on the impact on organs and systems. Isn't that right?

and systems. Isn't that right? Therefore, the overall Therefore, the overall mortality rate was mortality rate was increased. increased. increased. Hyperkyphosis is significantly Hyperkyphosis is significantly associated with associated with falls in falls in adults over adults over 65 years of age. And we see 65 years of age. And we see why the center of mass why the center of mass shifts forward, we shifts forward, we see a see a see a forward shift, the forward shift, the recovery of recovery of recovery of balance balance balance is impaired, and the is impaired, and the so so so -called righting -called righting response, that is, our response, that is, our ability ability ability to recover during a to recover during a fall, is also reduced.

fall, is also reduced. Functioning and Functioning and quality of life. We quality of life. We see that see that hyperkyphotic hyperkyphotic hyperkyphotic adults have a adults have a slower gait and a slower gait and a shorter stride. This is shorter stride. This is always associated with always associated with functional functional functional decline and worse decline and worse outcomes. And the risk of outcomes. And the risk of vertebral fracture vertebral fracture increases by 50% in increases by 50% in women with kyphosis over women with kyphosis over 52-53 degrees. So, there is 52-53 degrees. So, there is a lot of very a lot of very compelling compelling compelling research that research that supports supports supports the importance of the impact of the importance of the impact of these postural these postural changes and the importance of changes and the importance of early action. We'll early action. We'll look at some of look at some of these musculoskeletal these musculoskeletal effects that we've effects that we've already talked about. I already talked about. I just want to show just want to show how flexion, or how flexion, or bending of the spine, bending of the spine, creates forces that creates forces that contribute to contribute to contribute to compression compression compression fractures. So, the fractures. So, the only way only way these these these compression compression compression fractures can occur is through fractures can occur is through bending or bending or flexion forces. And that's why flexion forces. And that's why when we when we work with weights, we're work with weights, we're constantly stimulating the constantly stimulating the muscles in the back of the muscles in the back of the spine, this spine, this extensor mechanism, because extensor mechanism, because it takes pressure off the it takes pressure off the front of the front of the

vertebral body and vertebral body and straightens the spine.

For example, it was For example, it was quite interesting quite interesting to see that about to see that about 60 degrees of flexion 60 degrees of flexion results in results in a load on these a load on these vertebrae that is six vertebrae that is six times the times the body weight. So we have body weight. So we have consequences for every consequences for every system in the body, and system in the body, and it's a picture that it's a picture that absolutely reflects absolutely reflects systemic fragility. And systemic fragility. And that's responsible for that's responsible for such very poor such very poor outcomes in outcomes in fractures, especially fractures, especially hip fractures, in those hip fractures, in those situations where we situations where we have gastrointestinal have gastrointestinal compression, right?

Due to the displacement of these Due to the displacement of these abdominal organs abdominal organs, these, these postural changes postural changes are associated with heartburn and are associated with heartburn and constipation, decreased constipation, decreased appetite; they are not the appetite; they are not the only cause, but only cause, but they are major they are major factors. I have previously factors. I have previously emphasized the emphasized the importance of vital importance of vital lung capacity and lung capacity and respiratory function. We respiratory function. We see a decline in see a decline in all of these all of these indicators.

indicators. indicators. Gastrointestinal, Gastrointestinal, Gastrointestinal, urogenital urogenital urogenital compression, and pelvic floor stress pelvic floor stress change with change with increasing increasing increasing forward torso tilt. This is forward torso tilt. This is associated with frequent associated with frequent urges to urges to urinate, urinate, urinate, stress stress stress urinary incontinence, and urinary incontinence, and pelvic pelvic pelvic organ prolapse. The function of organ prolapse. The function of the diaphragm decreases, and we see changes in the, and we see changes in the spinal cord. Isn't that right spinal cord. Isn't that right? We have a spinal? We have a spinal cord, a central cord, a central nervous system, nervous system, part of this musculoskeletal system. So system. So we see we see spinal cord tension spinal cord tension associated with chronic associated with chronic pain, tension in the pain, tension in the brain, right?

brain, right? Associated with a lack of Associated with a lack of energy and even " head fog." Let's just go over these Let's just go over these cardiovascular cardiovascular cardiovascular consequences again. So in a consequences again. So in a normal rib normal rib cage, we have this cage, we have this beautifully preserved beautifully preserved space here. In a space here. In a compressed compressed compressed chest, when we have chest, when we have hyperkyphosis and the hyperkyphosis and the chest is collapsed chest is collapsed forward, we see forward, we see pressure on the heart and pressure on the heart and lungs, we even lungs, we even see impaired see impaired venous return, because we have, because we have increased increased increased compressive forces here in the compressive forces here in the chest cavity, and chest cavity, and something that everyone is something that everyone is talking about these days talking about these days is VO2 max. So, with a is VO2 max. So, with a decrease in VO2 max, our decrease in VO2 max, our body's ability body's ability to use, to use, consume, and consume, and assimilate oxygen assimilate oxygen decreases and becomes decreases and becomes impaired, and therefore impaired, and therefore our ability to our ability to exercise exercise, our functional, our functional capacity, capacity, capacity, decreases. Therefore, the decreases. Therefore, the general conclusion general conclusion is that is that hyperkyphosis hyperkyphosis hyperkyphosis detected during detected during physical examination physical examination should not be should not be ignored but should be ignored but should be considered as a considered as a clinically significant clinically significant indicator. I advocate indicator. I advocate treating it the same way treating it the same way we we we treat high treat high blood pressure blood pressure or irregular or irregular heartbeat; similarly, heartbeat; similarly, we must treat a we must treat a severely curved severely curved spine, which requires an spine, which requires an active clinical active clinical response. This isn't response.

Ruthu2019s posture transformation journey

This isn't just a just a "you're just "you're just getting old" excuse. So now getting old" excuse. So now I would like, I have the I would like, I have the honor of presenting honor of presenting this wonderful case of this wonderful case of transformation with Ruth, transformation with Ruth, who is with us who is with us on the podcast today. I'll show on the podcast today. I'll show you some of the scans you some of the scans we did, and we'll we did, and we'll talk

about some of the talk about some of the interventions she interventions she used.

used. used. So, Ruth came to So, Ruth came to us in November 2025 us in November 2025. Wow, it's been almost a. Wow, it's been almost a year and this is her year and this is her initial scan. We initial scan. We use the use the same technology same technology I described earlier I described earlier called Posture Pro. So on called Posture Pro. So on the left we have a side and side and front view of her posture, and on the right front view of her posture, and on the right we have what we we have what we call a stress screening. Eh, where screening. Eh, where the the the software records software records the degrees of deviation the degrees of deviation and the amount of pressure that and the amount of pressure that occurs in that occurs in that segment, in the thoracic segment, in the thoracic region, a region, a very high very high initial force is recorded. When initial force is recorded. When we look at we look at the position from the side, we the position from the side, we see a see a 35° forward deviation of the head, 35° forward deviation of the head, that is, a deviation from the that is, a deviation from the vertical line.

This is the most significant This is the most significant deviation in this deviation in this image, here there is only a image, here there is only a 3° pelvic tilt, and in the 3° pelvic tilt, and in the frontal plane, frontal plane, oh, almost nothing is oh, almost nothing is visible here. Everything else is below. Oh, actually below. Oh, actually there is a slight there is a slight deviation of the head deviation of the head to the right, a to the right, a head tilt of about 9 head tilt of about 9 °. In the load image, °. In the load image, the the software is doing the software is doing the physics calculations, and physics calculations, and this red arrow this red arrow going through her going through her thoracic thoracic thoracic spine shows spine shows the magnitude of the force. This is the magnitude of the force. This is measured in measured in newtons. So, at newtons. So, at around 105, we're seeing around 105, we're seeing about 40 about 40 extra pounds of extra pounds of pressure acting on her pressure acting on her thoracic thoracic thoracic spine due to spine due to flexion. Yes? So, flexion. Yes? So, those bending forces that those bending forces that I described earlier.

That's where we started, That's where we started, and the first check-up was and the first check-up was in February, and we immediately in February, and we immediately noticed significant noticed significant changes, which is quite changes, which is quite typical for our typical for our patients. The changes here patients. The changes here are that are that we look at the we look at the position from the side. The position from the side. The 35° angle changed to a 26 35° angle changed to a 26 ° angle. We can already see that ° angle. We can already see that the head has shifted the head has shifted closer to a position closer to a position above the shoulders. She above the shoulders. She got rid of the lateral got rid of the lateral deviation of her head. This is deviation of her head. This is all in the frontal all in the frontal plane. We have plane. We have no no no deviations here. And she deviations here. And she also reduced the also reduced the pelvic tilt somewhat. One more pelvic tilt somewhat. One more thing I didn't thing I didn't mention before: mention before: the the the software records software records what's called a what's called a posture score. The posture score. The posture index is the posture index is the result of analyzing result of analyzing all the different forces and all the different forces and degrees of deviation.

We aim for this We aim for this indicator to be indicator to be close to zero. close to zero. So, she went So, she went from a from a posture score of 40 to a posture score of 40 to a score of 31. She is score of 31. She is confidently confidently confidently approaching zero.

approaching zero. Here we see that the forces acting on her acting on her spine have decreased from spine have decreased from 105 to 88. We clearly 105 to 88. We clearly see a decrease in the see a decrease in the bending forces acting on her bending forces acting on her spine. And here is the spine. And here is the present. This is a picture present. This is a picture from August. That is, a from August. That is, a very recent one, where very recent one, where we see even more we see even more improvement.

improvement. improvement. Looking at Looking at the position from the side. the position from the side. Again, this is the Again, this is the most revealing most revealing shot. Now the head shot. Now the head has shifted to 9°.

has shifted to 9°. Remember that she Remember that she started at 35°. You can started at 35°. You can clearly see, it's clearly see, it's quite obvious quite obvious even to the naked even to the naked eye, that the changes eye, that the changes she achieved she achieved established a established a established a neutral neutral neutral pelvic position. So we have zero, pelvic position. So we have zero, still have some work to do still have some work

to do, but it's, but it's incredible, and no incredible, and no deviations in the deviations in the frontal plane.

When we look at the When we look at the stress test, we see that stress test, we see that the indicator has dropped from the indicator has dropped from 100 to 63%. So, the loads and loads and bending forces in her spine decreased by almost 50%. This is bending forces in her spine decreased by almost 50%. This is quite significant. The quite significant. The posture indicator is 50 % lower. It went % lower. It went from 40 to 20. We are from 40 to 20. We are eagerly awaiting the eagerly awaiting the results of her results of her next scans.

This is simply an amazing This is simply an amazing transformation, and transformation, and I am honored I am honored to be a part of this to be a part of this process. Oh, actually, process. Oh, actually, let me let me show you this. Good. We show you this. Good. We compare them side by side : here is the initial : here is the initial state in February, and here is state in February, and here is August. Ruth's program August. Ruth's program included included included targeted targeted targeted exercises to correct exercises to correct upper and upper and lower lower lower cross cross cross syndromes, and syndromes, and she also participates in she also participates in our program where we our program where we train the train the back extensors with heavier weights. When we studied the. When we studied the " " lift more" study, we lift more" study, we noticed that patients who we thought were who we thought were not doing not doing specific specific specific posture exercises, but were just posture exercises, but were just working on the working on the extensors, still extensors, still improved their kyphotic improved their kyphotic curve, but we added curve, but we added more targeted more targeted exercises. So we're seeing exercises. So we're seeing these incredible these incredible improvements. We have compiled a improvements. We have compiled a table with some table with some measurements, measurements, measurements, changes, and changes, and common common common deviations for Ruth.

deviations for Ruth. If you like If you like numbers: a total numbers: a total deviation of 28 deviation of 28 degrees, almost 30 degrees, almost 30 degrees of improvement, degrees of improvement, and that's a serious and that's a serious result. But the forces, result. But the forces, again, we again, we look at all these look at all these metrics, right? Those metrics, right? Those that decreased from a that decreased from a maximum maximum maximum value of over 120, which was even impossible to calculate, to was even impossible to calculate, to 82 Newtons. Newtons 82 Newtons. Newtons do not equal pounds, do not equal pounds, so we're talking so we're talking about 15 about 15 pounds. The angle of the pounds. The angle of the head tilt forward head tilt forward changed significantly from 35 to 19 changed significantly from 35 to 19 degrees. This is over 16 degrees. This is over 16 degrees of improvement, the degrees of improvement, the pelvic tilt pelvic tilt has normalized, and the has normalized, and the shoulder level shoulder level has leveled out. If you has leveled out. If you like like like today's episode today's episode and want and want more tips on more tips on strengthening your bones, I strengthening your bones, I invite you to my invite you to my free free workshop "Strong Bones for workshop "Strong Bones for Life." In this Life." In this class, I will help class, I will help you understand the you understand the basic steps to basic steps to strengthening your bones so strengthening your bones so you know where to you know where to start and what to start and what to focus on.

focus on. Check the video description Check the video description for the date of for the date of my next my next workshop and the registration link. And if you registration link. And if you can't can't can't join the join the live broadcast, don't live broadcast, don't worry.

worry. worry. Register anyway and you Register anyway and you will receive a recording to will receive a recording to watch at a watch at a time convenient for you.

time convenient for you. Now let's get back to the Now let's get back to the show. Wow, Dr. show. Wow, Dr. Claudius, it was really Claudius, it was really interesting to see all interesting to see all this data and this data and measurements, because I measurements, because I noticed that's how it all noticed that's how it all started. You started. You know, I went to Onro, know, I went to Onro, met Ruth, and one met Ruth, and one day I suddenly day I suddenly looked at her and looked at her and thought, "Wow, Ruth." And thought, "Wow, Ruth." And you know, as a you know, as a physical therapist, I physical therapist, I pay attention to pay attention to posture. I thought, " Wow, you Wow, you look fantastic.

look fantastic. What are you doing?" And that's exactly how it all What are you doing?" And that's exactly how it all

began. began. began. So, Ruth, why do So, Ruth, why do n't you tell n't you tell the story from your the story from your perspective, how it perspective, how it changed your life?

changed your life? Tell me how you Tell me how you started and what you did, started and what you did, it's really it's really inspiring. This is inspiring. This is fantastic.

fantastic. fantastic. Hello everyone. Thank you, Margie. Hello everyone. Thank you, Margie. Thank you, Dr. Thank you, Dr. Claudius. I was Claudius. I was really interested to see really interested to see all these numbers put all these numbers put together. I hope it together. I hope it was even more impressive and I was even more impressive and I learned even learned even more than you more than you told me told me before. So thank you.

before. So thank you. My path is a My path is a combination of several combination of several things that happened at the things that happened at the same time. First of same time. First of all, I have had all, I have had low low low bone density my whole life bone density my whole life due to genetic due to genetic predisposition. So I predisposition. So I never considered it a never considered it a big problem, big problem, other than to other than to be careful.

I tried several I tried several different medications, but different medications, but I couldn't take them, I couldn't take them, so I just gave up. But about two But about two years ago I had a years ago I had a repeat scan, repeat scan, and while the and while the bone density in my hips had bone density in my hips had barely changed, the barely changed, the bone density in my bone density in my spine had spine had decreased significantly. This decreased significantly. This really worried me and really worried me and motivated me to motivated me to do something.

do something. Margie's husband is a doctor, and he spent Margie's husband is a doctor, and he spent quite a bit of time quite a bit of time talking to me about the talking to me about the Oniero program. Of course, Oniero program. Of course, after I after I received the received the scan results, I was scan results, I was ready to listen and ready to listen and had a strong desire had a strong desire to change something. So, that to change something. So, that was one of the factors.

was one of the factors. Another factor was Another factor was that my daughter that my daughter started taking a lot of started taking a lot of photos, and I noticed that photos, and I noticed that in all the pictures I in all the pictures I looked bent looked bent forward. My posture.

forward. My posture. I didn't like I didn't like how I looked in the photo, how I looked in the photo, and my and my daughter's wedding was coming up. So I daughter's wedding was coming up. So I knew I had to do knew I had to do something about it, something about it, but I didn't know what to do but I didn't know what to do except except except try to keep my try to keep my composure. So after my composure. So after my daughter's wedding, I daughter's wedding, I went to Claudia for a went to Claudia for a checkup. I started checkup. I started the program, as she the program, as she said, in November of said, in November of last year, and very last year, and very quickly noticed that there were quickly noticed that there were things I couldn't things I couldn't do because of the do because of the limited range of motion that limited range of motion that I had trouble with. Some of them were. Some of them were related to posture ; some probably ; some probably due to fractures in due to fractures in the past that prevented the past that prevented me from using a me from using a full range of full range of motion with at least my motion with at least my left arm. So left arm. So Claudia said, Claudia said, you know, let's you know, let's try some of these try some of these exercises. And I started exercises. And I started trying the exercises, and trying the exercises, and she assured me she assured me that I would see that I would see improvements if I improvements if I did them regularly.

She said I She said I would know—that is, she would would know—that is, she would know—if I know—if I wasn't consistent. So wasn't consistent. So I was very I was very consistent. Well, I won't consistent. Well, I won't say that I didn't say that I didn't miss days. There were miss days. There were days when I days when I missed, sometimes three or four days in total, or four days in total, but overall I was but overall I was very consistent and very consistent and worked hard at it. And worked hard at it. And thanks to the exercises thanks to the exercises Claudia gave me, which Claudia gave me, which improved my range of improved my range of motion, and the motion, and the Oniero program itself, where I Oniero program itself, where I lifted weights, I lifted weights, I saw

significant saw significant changes. I changes. I noticed these changes myself. I noticed these changes myself. I felt felt felt stronger. I stronger. I felt that my felt that my posture became posture became more even. The whole approach more even. The whole approach to exercise has helped me to exercise has helped me notice when I'm notice when I'm doing something wrong doing something wrong. So it often. So it often became the main thing in became the main thing in my thoughts, my thoughts, for example, when I was for example, when I was walking. I try to walking. I try to walk a few walk a few miles a day. So I miles a day. So I purposefully purposefully purposefully tried to tried to tried to make sure I didn't make sure I didn't do things that I do things that I knew would cause knew would cause problems. And I consciously problems. And I consciously tried to do what Claudia showed me to Claudia showed me to stand straighter and stand straighter and monitor monitor monitor my posture better, to my posture better, to be more aware of be more aware of it in the future.

And between the exercises And between the exercises Claudia gave me and the Claudia gave me and the Oniero program, you Oniero program, you just see just see the results and I'm very the results and I'm very satisfied. I was satisfied. I was skeptical, but everything skeptical, but everything Claudia Claudia Claudia shared with me shared with me about Oniero made sense and about Oniero made sense and I had no problem with it I had no problem with it. This was. This was completely logical and completely logical and consistent with what consistent with what I expected. But I expected. But seeing the improvement, first, in my posture, and second, seeing the, and second, seeing the amount of weight I'm lifting— something I never something I never thought I could thought I could do. I think all of this do. I think all of this shows that shows that the program has the program has value. And I would value. And I would advise people advise people to think: if your to think: if your posture is not the way posture is not the way you want it to be, you want it to be, see a see a physical therapist.

If you have If you have bone density issues, bone density issues, consider this; consider this; if you're lucky, you'll if you're lucky, you'll find both of these find both of these things in the same person, things in the same person, like I did with Dr.

like I did with Dr. Claudia. Claudia. Oho. Ruth, why don't you Oho. Ruth, why don't you tell me how much tell me how much weight you lift? weight you lift?

Because at the very Because at the very beginning, what were you beginning, what were you told, given told, given your condition? What have you your condition? What have you been told before about been told before about what you can what you can and can't lift?

When I started When I started the program, I was sick the program, I was sick a few times last year a few times last year and lost a little and lost a little weight, was weight, was underweight, but underweight, but at the beginning of the program I at the beginning of the program I weighed 98 pounds.

Claudia said I Claudia said I should be able to should be able to lift my own lift my own weight, and for overhead presses, weight, and for overhead presses, she she she thought I could thought I could go up to at least 40 go up to at least 40 pounds. And we talked a lot pounds. And we talked a lot about my about my bone density and bone density and not doing not doing anything that could anything that could cause problems cause problems or stress fractures or stress fractures or anything like that. And I or anything like that. And I don't see any signs of that happening. So we happening. So we moved slowly. We are moved slowly. We are careful. We did careful. We did everything right. Now everything right. Now I'm lifting. I think I'm lifting. I think my weight my weight has increased a little. I has increased a little. I think I think I weighed myself the other day. This is weighed myself the other day. This is 102.5. Maybe the scales are 102.5. Maybe the scales are a little low, but a little low, but I lift the weight off I lift the weight off the floor. And in the floor. And in squats I squats I lift 101.5 pounds. And lift 101.5 pounds. And in overhead exercises in overhead exercises I lift 35 pounds. And I lift 35 pounds. And I'm getting ready to increase I'm getting ready to increase that to 37.5. So, I'm that to 37.5. So, I'm close to close to lifting my lifting my current weight, I'm current weight, I'm definitely lifting definitely lifting more than my starting more than my starting weight, and with the exception of weight, and with the exception of overhead exercises, I'm overhead exercises, I'm getting close to the 40 that getting close to the 40 that Dr.

Dr. Dr. Claudia predicted. And, you know, I Claudia predicted. And, you know, I might be able to go further might be able to go further. I have to be. I have to be careful, but if it makes careful, but if it makes sense to do it, then it's

sense to do it, then it's worth doing. And we'll worth doing. And we'll see how it goes see how it goes after after after consulting with consulting with Dr. Claudia. That's Dr. Claudia. That's great, Ruth. It great, Ruth. It really is so really is so exciting. And how are you exciting. And how are you feeling? How is that? Do feeling? How is that? Do you feel you feel the difference when you become the difference when you become strong? Oh, I strong? Oh, I absolutely feel the absolutely feel the difference. Before starting difference. Before starting the program, I felt like I the program, I felt like I was losing muscle was losing muscle strength and couldn't carry strength and couldn't carry some of the heavy things I some of the heavy things I could before.

Now I can wear Now I can wear these things without any these things without any problems. And I am also problems. And I am also very happy with that. very happy with that.

Oh, I just Oh, I just love it. And that's what love it. And that's what I always say, I always say, you know, this diagnosis is a catalyst, is a catalyst, right? It's like he's right? It's like he's forcing you to forcing you to do something, but then you do something, but then you look back and see that look back and see that you're stronger, more you're stronger, more independent, independent, independent, so so so many positive many positive changes are happening. Well, Ruth, I'm changes are happening. Well, Ruth, I'm just thrilled with just thrilled with your results, and your results, and I know how I know how hard you've hard you've worked, but it's worked, but it's really inspiring to really inspiring to so many others who have been so many others who have been thinking, "Oh, posture, can thinking, "Oh, posture, can it really make a it really make a difference?" And you difference?" And you really proved that really proved that through hard through hard work, and you put in work, and you put in a lot of effort, it is a lot of effort, it is indeed possible. So, Dr. Claudius, do, Dr. Claudius, do you have anything to you have anything to say?

say? say? Yes, we can Yes, we can change our posture at change our posture at any age, and we any age, and we can become can become stronger at any age. This is the any age. This is the most important message, and no matter what you've been told before, just try it. You, just try it. You will be surprised.

will be surprised. I think this is the I think this is the most common most common most common comment I hear comment I hear from patients: how from patients: how surprised they are surprised they are to discover to discover this potential within themselves. And for this potential within themselves. And for me, it's incredibly me, it's incredibly nice to hear that, and it's so nice to hear that, and it's so exciting to go through this exciting to go through this journey with them.

journey with them. I would just add to I would just add to that because I wasn't that because I wasn't sure I could sure I could do much do much with my posture.

with my posture. I mean, I I mean, I worked on my left hand movement limitations 50 years left hand movement limitations 50 years ago, but I didn't see ago, but I didn't see much change. But much change. But obviously science obviously science has taken a step forward, has taken a step forward, and Dr. Claudia and Dr. Claudia saw what I saw what I needed and was able to needed and was able to choose the right choose the right exercises for me. But I exercises for me. But I wouldn't have believed that my wouldn't have believed that my posture could posture could improve improve improve so quickly. And so quickly. And you know, this was a you know, this was a great added great added bonus of the Onierro program, which I, which I joined because of bone density issues. So bone density issues. So I'm very pleased and I I'm very pleased and I encourage people encourage people to try new things because to try new things because you'll be you'll be surprised. I was surprised. I was surprised, and you surprised, and you will be surprised too.

will be surprised too. Pleasantly surprised. Pleasantly surprised.

Why personalized evaluation matters

Yes. I think another Yes. I think another interesting point is: if interesting point is: if you have something else, like, you have something else, like, for example, you had a for example, you had a problem with your shoulder, problem with your shoulder, that's why it's so important to that's why it's so important to work on that as well.

work on that as well. Dr. Claudia Dr. Claudia has really been working on has really been working on this other issue, this other issue, so you're not just so you're not just doing the doing the O'Neer program. If something is wrong, O'Neer program. If something is wrong, we have to we have to fix it, right, fix it, right, Dr. Claudius? These Dr. Claudius? These things are very important; things are very important; that's why a that's why a condition assessment is needed, it's…it's condition assessment is needed, it's…it's not as simple as it not as simple as it seems.

seems. seems. Absolutely, that's why Absolutely, that's why we need a we need a clinical perspective to clinical perspective to understand the big understand the big picture, yes.

Four posture exercises to improve alignment

picture, yes. So now Dr. So now Dr. Claudia will share Claudia will share exercises, some exercises, some exercises that she exercises that she thinks are really thinks are really important. I asked important. I asked her, "Why don't I her, "Why don't I show you some show you some exercises?" And I think you're exercises?" And I think you're showing four showing four exercises that people exercises that people can do, that can do, that they can they can start with, that are easy to start with, that are easy to do, to start do, to start working on their working on their posture; because now that posture; because now that you know and you know and see the results, it's see the results, it's simple, it's just so simple, it's just so important. And truth be important. And truth be told, it's not just told, it's not just for people with for people with osteoporosis in osteoporosis in our our our cell phone society.

cell phone society. And I mean, it's the younger generation that really suffers. So younger generation that really suffers. So this is important not only this is important not only for you, but also for your for you, but also for your children and grandchildren. It's children and grandchildren. It's just, it's really a just, it's really a dilemma right now. So this is dilemma right now. So this is so important. OK.

so important. OK. So, Dr. Claudius, So, Dr. Claudius, let's begin. Thank you, Ruth, let's begin. Thank you, Ruth, thank you very much. You thank you very much. You will return at will return at will return at the end. So, here the end. So, here I will share four I will share four initial exercises. We have Hannah here, our. We have Hannah here, our clinician, and she's clinician, and she's going to demonstrate two going to demonstrate two exercises for upper exercises for upper cross-over cross-over cross-over syndrome and two for syndrome and two for lower lower lower cross-over cross-over cross-over syndrome. Here she syndrome. Here she is doing a is doing a neck retraction exercise. You'll neck retraction exercise. You'll notice that I like to notice that I like to ask patients to ask patients to place their hands so that place their hands so that the thumb is on the thumb is on the sternum, the index finger is on the chin, and you on the chin, and you just step back.

This helps This helps patients understand patients understand that they should that they should move backward, and we move backward, and we lift the back of the lift the back of the head up.

head up. So, the direction is from So, the direction is from that finger and upwards. This exercise This exercise targets the neck flexors, targets the neck flexors, the muscles in the front of the muscles in the front of the neck. I'll make the neck. I'll make her do it again.

her do it again. So you see So you see them lengthening them lengthening here in this position. here in this position. Now we are doing Now we are doing a retraction. So, we're a retraction. So, we're training the neck flexors training the neck flexors and also lengthening the neck and also lengthening the neck extensors here. You extensors here. You will see that in this will see that in this final position her final position her ear is perfectly ear is perfectly aligned with her aligned with her shoulder. The next shoulder. The next exercise is a very gentle exercise is a very gentle exercise to exercise to straighten the shoulder straighten the shoulder and open up the and open up the tight muscles here, in the front of the shoulder,, in the front of the shoulder, called, in particular, the called, in particular, the pectoralis minor.

This muscle, when This muscle, when tense in tense in such a crossed such a crossed syndrome, pulls the shoulder syndrome, pulls the shoulder forward, dragging the forward, dragging the scapula along with it, scapula along with it, creating the appearance of a creating the appearance of a hunched back and hunched back and

increasing the stress of increasing the stress of hyperkyphosis. So, hyperkyphosis. So, Hannah just puts her Hannah just puts her hands to her sides. You hands to her sides. You see her fingers are see her fingers are spread apart, which spread apart, which tightens the fascia throughout her tightens the fascia throughout her arm, and she's arm, and she's just rotating her just rotating her shoulder from a neutral shoulder from a neutral position, position, position, opening up her opening up her ribcage. So, a very ribcage. So, a very simple exercise, very simple exercise, very effective. You can effective. You can start with one start with one set, maybe set, maybe one or two one or two sets of 10 sets of 10 for these exercises. So, for these exercises. So, here's Hannah doing a here's Hannah doing a glute bridge.

She works on She works on correcting lower correcting lower cross cross cross syndrome, in which syndrome, in which we have weaker buttocks and we have weaker buttocks and weak abdominal muscles.

You will notice that she You will notice that she inhales before the inhales before the movement, and then, as she movement, and then, as she exhales, she activates her exhales, she activates her abdominal muscles and abdominal muscles and performs the movement on the exhale. So every time we. So every time we perform a movement that perform a movement that requires effort, we requires effort, we also synchronize also synchronize our breathing. So, we our breathing. So, we exhale during exhale during exertion. I'll play exertion. I'll play the video again so you the video again so you can see. So, can see. So, inhale, exhale. And now inhale, exhale. And now it moves on it moves on the exhale, up and down.

the exhale, up and down. And now she And now she is breathing again. and performs the movement is breathing again. and performs the movement on the exhale with on the exhale with activation of the activation of the abdominal and gluteal muscles.

Here we see Here we see Hannah doing a Hannah doing a deep deep deep abdominal exercise. That is, the abdominal exercise. That is, the transverse transverse transverse abdominal muscle. "90-90 " position: 90 degrees at the knee " position: 90 degrees at the knee and 90 degrees at the and 90 degrees at the hip. The spine is in a hip. The spine is in a neutral neutral neutral position here while she position here while she is lying face down. She will take a is lying face down. She will take a breath breath breath before performing the movement.

And on the exhale, she And on the exhale, she will perform a movement, will perform a movement, activating the activating the abdominal muscles. Up and down abdominal muscles. Up and down we exhale. So, let we exhale. So, let 's begin. So, inhale, 's begin. So, inhale, exhale. It activates the exhale. It activates the abdominal muscles. It is very abdominal muscles. It is very important that the position of the spine does not the position of the spine does not change when lowering and raising the leg. That is, the change when lowering and raising the leg. That is, the spine should not spine should not move up or move up or down. It should down. It should remain completely remain completely neutral throughout the neutral throughout the movement. That's all movement. That's all I wanted to I wanted to share. These exercises are share. These exercises are quite effective. They are quite effective. They are easy to perform.

easy to perform. just pay just pay attention to the attention to the synchronization of your synchronization of your synchronization of your breathing. So always breathing. So always exhale with effort.

The rule is The rule is that the spine that the spine remains remains remains neutral, neutral, neutral, maintaining its natural maintaining its natural curves, as I curves, as I mentioned at the beginning mentioned at the beginning about optimal about optimal posture throughout the posture throughout the movement.

movement. Dr. Claudius, that Dr. Claudius, that was wonderful. And you was wonderful. And you know what everyone know what everyone always asks, always asks, because we talk about because we talk about not wanting not wanting people to do the people to do the rounding and rounding and bending like you bending like you showed because it showed because it increases the risk of increases the risk of fractures, and they fractures, and they always ask, that's always ask, that's one of the most important one of the most important questions. So, how questions. So, how can I strengthen my can I strengthen my abdominal muscles? So, I think abdominal muscles? So, I think you did a great job, you did a great job, and this last exercise is a great great great way to start way to start because it's very because it's very effective and safe. Well, I can't, I can't thank thank thank you both enough.

And is there anything you both enough. And is there anything last you want to last you want to say, Ruth?

I would just remind I would just remind people that I people that I think it's important think it's important to see a to see a licensed licensed licensed professional when you're professional when you're doing these doing these posture exercises, posture exercises, because I didn't because I didn't do any of the do any of the exercises that Dr.

exercises that Dr. Claudia showed in Claudia showed in this video. I didn't this video. I didn't need to need to strengthen my strengthen my abdominal or gluteal muscles. I was exercising abdominal or gluteal muscles. I was exercising regularly regularly regularly on a on a consistent basis before consistent basis before joining the joining the Onierro program. But there Onierro program. But there were certain issues with were certain issues with my posture that my posture that Dr. Claudia Dr. Claudia was able to address by was able to address by providing me with providing me with appropriate exercises appropriate exercises adapted to my adapted to my needs. And I believe that it is important for each person to receive important for each person to receive such an individual such an individual therapy program.

therapy program. I would also like to add and I would also like to add and encourage you—you encourage you—you will be surprised at will be surprised at how much you can how much you can improve your condition.

improve your condition. And you know, And you know, consistency is consistency is key, but don't key, but don't beat yourself up if beat yourself up if you miss a day or you miss a day or two.

two. two. Oh, that's such great Oh, that's such great advice, Ruth. I just advice, Ruth. I just think…like I think…like I said, when I said, when I saw you…first of all, I saw you…first of all, I was so happy that my was so happy that my husband was husband was referring everyone to Dr.

referring everyone to Dr. Claudia, and, you know, Claudia, and, you know, when I saw you, I when I saw you, I just couldn't just couldn't believe my eyes.

believe my eyes. I thought, "Wow, you I thought, "Wow, you look look look amazing." Still amazing." Still, hard, hard work pays off, work pays off, and that's why I wanted and that's why I wanted you to be here and you to be here and show people that it's show people that it's possible. You saw where possible. You saw where she started, and she started, and I think that's the most I think that's the most interesting thing. But interesting thing. But what you what you said is important: people often said is important: people often see something in a magazine see something in a magazine or somewhere and think, " Oh, let me try Oh, let me try that." But the best thing you that." But the best thing you can do is can do is get tested, get tested, work on work on your issues with a your issues with a physical therapist, physical therapist, and that's when you'll and that's when you'll see real see real results and results and get the right get the right direction. This is so direction. This is so wonderful. Doctor wonderful. Doctor Claudius, what do you Claudius, what do you need? First of all, need? First of all, tell people, because tell people, because as soon as I as soon as I met met met Dr. Claudia, I Dr. Claudia, I decided, "I'm going to try decided, "I'm going to try this." And I became this." And I became incredibly strong incredibly strong thanks to O'Neero, even though I've thanks to O'Neero, even though I've been doing been doing strength strength strength training all my life. This is a training all my life.

How to work with Dr. Claudia

This is a whole different level. whole different level. Why don't you Why don't you tell people who tell people who live in New York or live in New York or New Jersey where you New Jersey where you are and how they are and how they can contact you?

? Yes. We're in Yes. We're in Somerset, New Jersey, right off Jersey, right off Route 287, Exit 12. I Route 287, Exit 12. I always ask, where are the always ask, where are the locals? Because we have patients who travel an hour patients who travel an hour and a half to two hours and a half to two hours from Pennsylvania, from Pennsylvania, from New York, from from New York, from upstate upstate upstate New York. We New York. We even have patients even have patients who come from who come from Virginia for this Virginia for this program. So yes, we

program. So yes, we want want want locals to come. We will locals to come. We will definitely find a definitely find a place for you. And I really love place for you. And I really love my job. You've my job. You've seen Anna, she's a seen Anna, she's a clinician who works clinician who works with this. There with this. There is another very is another very talented talented talented specialist on my team. I am very specialist on my team. I am very happy for my team.

We are passionate about We are passionate about our work, and our our work, and our true vision is to impact our impact our community and community and change these patterns change these patterns that are perceived as the that are perceived as the norm, when in reality norm, when in reality they are not the norm at all they are not the norm at all and are not and are not part of aging.

So we just want to So we just want to clarify this. clarify this. I'll add all of this to the I'll add all of this to the release notes. release notes.

I will also note that I will also note that Dr. Claudia Dr. Claudia came to the came to the "Happy Bones" community and "Happy Bones" community and conducted several conducted several classes. They are available classes. They are available online and they are online and they are really great, really great, teaching people how to teaching people how to breathe, how to work breathe, how to work with their feet, and many with their feet, and many other things, other things, including home including home exercises. So I'll provide exercises. So I'll provide all of these links all of these links since everyone since everyone really liked them.

really liked them. Dr. Claudius, these Dr. Claudius, these were such good were such good classes, and they are classes, and they are accessible to everyone.

accessible to everyone. One last word One last word from me, Margie. Yes. from me, Margie. Yes. I just want to I just want to make sure everyone make sure everyone knows: I highly knows: I highly recommend recommend recommend Dr. Claudia's program. I have benefited immensely from it, and benefited immensely from it, and although I don't think I've although I don't think I've said it before, said it before, I highly recommend it to I highly recommend it to everyone. So thank you.

everyone. So thank you. Thank you. Thank you for Thank you. Thank you for trusting us. trusting us. Yes, I still can't Yes, I still can't believe it, you know, I believe it, you know, I never believe in never believe in coincidences in life. And when coincidences in life. And when Dr. Belinda Beck, Dr. Belinda Beck, the person who created, the person who created, you know, who did the you know, who did the Lithmore study and Lithmore study and created Ona, when I created Ona, when I asked her, "Is there asked her, "Is there anyone in the United anyone in the United States who is States who is doing this doing this program?" When I program?" When I interviewed her interviewed her for my summit, she for my summit, she said, "Oh, one said, "Oh, one person." I asked, " Where are they?" "Somerset, Where are they?" "Somerset, New Jersey, 25 New Jersey, 25 minutes from where I live." It was no I live." It was no coincidence that I met coincidence that I met you, Dr. Claudius.

you, Dr. Claudius. And I feel so And I feel so grateful because you've grateful because you've changed the lives of changed the lives of so many people, and it's so many people, and it's just…it's just just…it's just amazing. So, thank amazing. So, thank you both for you both for sharing this. And I'm sharing this. And I'm really… I'm so excited to be really… I'm so excited to be able to able to tell the world about this tell the world about this and let people and let people know what's possible. And that's how know what's possible. And that's how I look at I look at things. Do you know what we things. Do you know what we can do? And can do? And when we see such when we see such good results, it is, good results, it is, in a way, a in a way, a blessing blessing blessing disguised as a disguised as a hardship, right, Ruth?

hardship, right, Ruth? Yes. Yes. Yes. OK. Thank you very much. OK. Thank you very much. Thank you. Thank you. Thank you. Thank you. Thank you, Ruth. Thank you, Ruth.

Thank you. No, I'm grateful to Thank you. No, I'm grateful to you. I hope you you. I hope you enjoyed this enjoyed this interview as much as interview as much as I did and now you have a I did and now you have a better understanding of the better understanding of the importance of posture. And the importance of posture. And the

good news is that there is a lot that can be done. All references lot that can be done. All references to the classes to the classes taught by Claudia, as well as taught by Claudia, as well as her institution, her institution, will be in the will be in the release notes. So, release notes. So, thank you very much for watching, and I thank you very much for watching, and I look forward to seeing you look forward to seeing you in the next in the next episode.