

## **121\_Huffines\_Sports\_Med\_Morton**

**Tim Lightfoot.** And this goes along with our initiative where we're looking at athletes in the arts and so we have Miss Jenny Morton on with his today from the United Kingdom. Welcome to the podcast today Jen.

**Jenny Morton.** Thank you very much. Great to be here.

**Tim Lightfoot.** Let me tell the audience a little bit about you and why we've got you on. Jen has got a huge resume as a performer and as a teacher and as a clinical practitioner. She worked as a ballet dancer and then in musical theatre on tour and in the West End of London for many years. And for those you on the podcast that aren't familiar with the West End that's a kind of the older, more established equivalent of our Broadway here in the United States. She trained as a sports massage therapist at St. Mary's University. She is a qualified osteopath and she has over 20 years of experience in teaching all styles of music. She has been working with the British Association for Performing Arts Medicine in London. She does training, both vocal and dance training, all over the world. She has trained many performers that are on our Broadway as...and we were just chatting about, she was in recently in Morocco as well, which she will tell us about in a few minutes. She continues to sing as a professional singer with the group Manhattan Music at various venues, both nationally and internationally and I was privileged to have Jenny as part of a presentation I did at a recent meeting and let me tell you folks, she knocked the socks off. Everybody and there was no way that the band members could keep up with her. So we're so glad to have you on the podcast today Jenny.

**Jenny Morton.** Great to be here.

**Tim Lightfoot.** So let's just get started off. Many people may not think about injuries in dancers and vocalists and musicians. Do those kind of things happen?

**Jenny Morton.** Absolutely and it is something that I come across all the time when I talk to people about what I do and they say, oh performers get injured? I think it's a cultural thing, it's...if you go to a sports event and somebody gets injured at a football match, tennis match, whatever the whole thing would stop. The trainer will come on, they were treated in full view of everyone, they stretch it off if necessary, somebody else is brought on. If you go to the ballet, go to the concert, a rock concert, orchestral concert and somebody gets injured, they're not going to stop the whole thing and bring the physical trainer on and treat them in full view of everyone. It's hidden. Nobody wants to know about it. They want...people come to the performing arts for escapism. They don't want to know these people are human and that they break so I think culturally there's this sort of idea that to these people are super human and don't get injured. And then it's also reflected into the performer's themselves, that there's an awful lot of negating of their own injuries and pretending it's not happening because they don't want to face the fact that this might stop them from doing their performance and earning their living so I think it comes from both sides really.

**Tim Lightfoot.** So that really also though, as you just said, part of that performance credo of the show must go on.

**Jenny Morton.** Absolutely, absolutely.

**Tim Lightfoot.** Well now let's talk about vocalists for just a moment. People may not think that vocalists get injured but their injuries may not be the big orthopedic type that we're used to thinking about, right?

**Jenny Morton.** Sure, yeah. I mean the singers that I treat in the clinic in London they're normally presenting with some sort of issue with the voice in terms of perhaps the missing part of their natural range, they've lost an upper register, there's some sort of huskiness or crack coming through the voice, they've got issues with breathing pattern or something like that. What we have to understand about the voice is that it is an organic instrument so it's going to be very reflective of not only the state of physical health but it's also the state of emotional health as well. Any sort of anxiety and issues in their personal life may well be brought into the vocalizing. So we really have to look at this instrument in the context of all of that.

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Another thing...

**Tim Lightfoot.** A very holistic approach to that.

**Jenny Morton.** Totally, totally.

**Tim Lightfoot.** Yeah.

**Jenny Morton.** And the other thing to understand about the vocal anatomy is its location in the body, helps see the vocal apparatus is sitting in the neck area and the front of the neck area we have the larynx, which is the voice box that glides up and down in the throat as we sing, speak, vocalize in any way and we also have the hyoid bone above that which is a very unique bone in the body, it's a little horseshoe shaped bone that sits just above the voice box but it is the only bone in the body that doesn't articulate with any other bone. Most bones of the skeleton meet another bone at a joint, this one doesn't. It's literally suspended in space by a sling of muscle attachments and these muscles originate from various structures around. From the skull to the jaw down to the voice box, the larynx itself, down to the sternum. There's even a muscle that goes from the hyoid bone to the inside surface of your shoulder blade, so the alignment of all those skeletal structures around it are going to have a direct effect on the ability of the voice to be optimal and to be able to glide freely in this area. So the neck obviously is a very mobile area in the body, therefore, it has the ability to sort of have this plastic tendency to reflect any anomaly in the postural structures below it. So when I'm treating singers, vocalists I'm not just looking at the voice structure, the vocal apparatus, I'm going to start at the feet and work all the way up because how the feet contact the ground, how the structures above them are built creates

the foundation and the level surface or the not level surface in some people's cases, for the vocal apparatus to work optimally. So the human body appears to be symmetrical, it's not and some people are always quite surprised when I'm examining them. I say well you've got one leg that's slightly longer than the other. This is quite a common thing. Some people have that to more or less a degree. If the legs are not equal in length, when you're standing up and most folks are working in a standing position, the floor obviously levels the feet up, so if you've got one leg that's a bit longer, it's going to push the pelvis up slightly on one side, therefore, the pelvis is now not level. The spine originates in the pelvis, the sacral bone, which is the triangular shaped bone at the base of the spine it's held between the two bones at the pelvis so if that's not level it's going to start the spine off on a tilted journey. We are designed...I'll sort of [??? 00:08:03] to the primitive sort of mechanism to...well survival mechanism really...but we need to have our head oriented over the center of our bodies. Number one, if the spine starting off at tilted angle, the head that can weigh an average of about 12 pounds, it's a very heavy bit of kit, is going to...it's not sort of coming off a straight spine we're going to fall over. So the body needs to bring that head back over the center of gravity. Also our eyes need to be, as a sort of again a primitive survival mechanism, our eyes need to be level that enables us to judge distances. This is a survival mechanism if we're being approached by a predator we need to judge how far that predator is away to devise our exit strategy. So the body will always right itself. So if we've got this pelvis that's sort of at a slightly tilted angle, we've got a spine that's heading off to one side, the muscles around that are going to start to contract, to draw the spine back towards the midline. Often this is a little too exaggerated so a little bit further above that something else will pull us back the other way and we start to get this zig zag pattern through the spine which ultimately lines up with the neck bringing the eyes back to a level position. So this is what's known as a scoliosis in the spine. Some people are born with this, it's something that is structurally inherent within their anatomy. Other people will develop this out of habitual postures, the way they habitually sit or if they sit with their legs crossed and their pelvis isn't level the muscles will start to take on these shapes and create what we call a functional scoliosis. So all of these effects are going to effect the ability of that vocal mechanism that's sitting freely in the neck area to glide up and down optimally and produce sound without tension.

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**Tim Lightfoot.** But what you're talking about is, in most cases you're talking about someone standing level. I mean I've seen musical theatre where you have vocalists that are suspended. I mean there is one like the Spiderman right now that was on Broadway where there, a lot of their vocalists were suspended. I guess the most common thing is all the dancing that often goes on in musical theatre and so the person isn't standing still when they're trying to dance. And I know that's one of your specialties is working with folks who sing and dance. So how do you compensate for that? How do you keep the voice steady? How do you train people to do that if they're going to be moving and they're going to lose that solid foundation?

**Jenny Morton.** Yeah. So this is a very tricky area and what it comes down to, the thing that needs to know where home base is. They need to have a good sort of understanding of where neutral is in that body and for their voice so that they... wherever they are in the movement they're moving in and out of that neutral but they've always got the neutral to come back to and try and find that as often as they can throughout the movement. The issue with dancing and singing simultaneously is actually more of an issue of breathing patterns so dance training, anybody that dances to any kind of standard will have gone through very rigorous dance training from very young in age. The dance training trains you, particularly in your classical training, to pull the abdominal muscles in and up. It breaks in and up and this is absolutely inheritant in every dancer that you see. If you then come into trying to vocalize on top of that you're actually creating issue with the breathing patterns so in order to breathe optimally... I mean basically singing is [accilation? 00:12:02], singing happens on an out breath, to have a nice long sustained phrase we need a good tank of air to be able to sustain that accilation so we need to draw in a full tank of air. The way the body does this, the diaphragm, which is the large muscle that sort of bisects the body from front to back at the base of the ribcage, it's a domed structure at rest. When you take an in breath, the diaphragm contracts and flattens and to do that it actually has to push the abdominal contents, one of our abdominal organs, down and outward so we need an expansion of the abdomen in order to get a full lung full of breath. If the dancer is bracing their abdominal muscles inwards and upwards, they're actually restricting that expansion, therefore, the diaphragm is unable to make a full descent, therefore, then unable to take in as full a breath so they're doing what we call upper chest or shallow breathing so breath with the sort of upper mechanisms. So they're going to have less breath in the system to sustain phrases, but also when you're trying to get volume and particularly in musical theatre where a lot of the sound is this very strong belt sound, if you don't have enough what we call subglotal air pressure, enough pressure below the glottis, which is the little sphincter at the top of the vocal mechanism, you won't be able to create that sound naturally, therefore, the singer will start to try and create that by overworking the muscles, particularly the muscles that attach to the upper surface of the highway, what we call the super highwayed muscles and they're going to start like any muscle, if you overwork it or use it inappropriately, it's going to get strained and in trouble. And this is where we can start to see issues with vocal strain. So trying to train the dancers to be able to release the abdominal muscles to take an efficient in breath it's one of the primary areas that I focus on when working with these individuals because it's just completely at odds with what they can... performances. And I went through this myself moving from being a ballet dancer into musical theatre. And for me when performance, you go on stage the first thing that happens is the abs go in and up. It's just like a learned sort of behavior. So you have to kind of deconstruct that and allow them to trust that they will have the support necessary to create all the dance moves that they need to do without bracing those muscles in and up. At some points that may be necessary, other points it isn't necessary. So we need to be able to tread a path between when it's appropriate to brace the muscles and when you need to release them to get the breath in.

**Tim Lightfoot.** Do they have you...do shows have you come in and consult particularly in musical theatre if they may be having problems with this with the vocalists?

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Or do the producers of these shows basically hire these people and assume they're going to be able to do it and if they can't, then they move onto somebody else?

**Jenny Morton.** Unfortunately, yeah, that tends to be the way at the moment. It happens is that it's, if you can get by and do it, great, if you break, well there's another hundred dancers and singers that we can employ to come in and do it so I tend to work more on an individual basis rather than through production. But it would be my dream that production would consult a specialist in this area. But actually I think what it really comes down to is the training that in musical theatre training it is very rare for this, what we call integrative training to occur. In training establishments you tend to do all your dance training in one room with a dance trainer, you do all your vocal training in another room with the vocal coach and the two never really talk to each other. And then when you come into production, the choreographer does all the choreography in one room, the musical director teaches you the vocal repertoire in another room and they tell you, right you need to breathe at this point in this phrase and this point in that phrase. But it might be that you're upside down [??? 00:16:19] at that point or you're at the top of a jump and the breathing patterns to get you there physically are running counter to what is required to get that vocal moment. So in my dream world we have choreographers and musical directors who talk to each other and say, okay, well I want this to be a big vocal moment in the show, so perhaps we'll put a dance move in there that will support that rather than what happens at the moment where the dancer is left to try and figure this out for themselves and it's...

**Tim Lightfoot.** So does that not happen, that kind of communication does not happen between the choreographers and the vocal folks?

**Jenny Morton.** Not in my experience and in the experience of the individual performers that I work with. So I've just been recently in New York working with some Broadway performers there and I was chatting to them about this and saying are you taught this? And they said no we were never taught it in college and in the theatre now we're just left to figure it out for ourselves. So the performer is left just try and work through that problem of find a way around it themselves. And a lot of them will manage to do that but I would like to see this become part of musical theatre training, that they are taught how to integrate these two things safely because I obviously see the end point of this when people come in trouble either with their voice or with their local back or their hips if they...a lot of the singers that are required to dance don't have as good a dance training, they have a better singing training. They're using great breathing patterns for their singing but it's not giving them the required lumbar stabilization for the dance moves that they're doing. So they're coming in with lower back problems. So it works both ways. So

for health and safety of these performers I would like to see a lot more integration and that's my mission at the moment, so I'm slowly getting there.

**Tim Lightfoot.** So how do you accomplish that mission? Is this an early age education thing or is this getting the dance and the vocal teachers together? So how are you going about doing this, fulfilling this mission?

**Jenny Morton.** Well I've just launched a new certification course in New York along with the voice specialist, Joan Melton who's written many books on the subject of voicing for musical theatre and for acting. So we call these musical theatre performers our triple threat performers because they're required to dance, sing and act and these are all taught at the moment a separate entities rather than integrated disciplines. So we have developed a certificate course for voice teachers to learn integrative methods. So we've just done our first course a month ago in New York and we had some master voice teachers from all over the world, some of whom work with classical singers, some work with musical theatre performers, some work with classical actors but they will recognize that they need to understand the other disciplines better so if they have a ballet dancer coming into them for voice training they know where this dancer is coming from and what patterns they're using. So we have created this course where we're teaching them anatomy from the foot to the head, not just at the vocal apparatus, which tends to be their training at the moment, and also I'm teaching them all the different dance disciplines, letting them understand what these dancers are having to do and how they've been trained and how we can, using the anatomy and safely integrate all these disciplines and have them have an optimal performance in the safest way possible.

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**Tim Lightfoot.** Wow, sounds great. So all that training is fascinating. So let's move a little bit off the train and a little bit...and talk about how you got into this. You obviously were a performer from a very early age. How did you decide that you wanted to get into healthcare of performers?

**Jenny Morton.** I think that started...I was at age 17 I was at dance college, I was sort of a year away from going into the profession. I ended up with a horrible injury, shin splints, to the point where I could barely walk let alone dance and just completely by fate on our college notice board a poster went up about an osteopath who was an ex-dancer and in her final year of osteopathic training and was doing a thesis on shin splint in dancers and wanted volunteers to come and be part of her case study.

**Tim Lightfoot.** Right place at right time, huh?

**Jenny Morton.** Right place, right time, serendipity. So I leapt at the chance and went and worked with her and at that point I'd be in full-time dance training for 10 years, I started full-time training at seven, I'd been training since I was two-years-old and the things that she picked

up on in her examination of me and of my dance technique no teacher in all those 10 years had picked up on. This was using the anatomy in a very finite way to look at the dance technique. And basically the way I was approached in dance technique was jamming my anatomy up and causing this problem. So she within the space of three months worked very intensely with me, got rid of the problem but also solved an awful lot of other issues that I was having around achieving this sort of...the extreme postures required for classical ballet. So this kind of lit a little light bulb in my head and thought, huh, this is very interesting. So that was in the back of my mind. And then I went through my dance career, had my share of injuries, had surgery on one foot and you start to learn a lot about your body. And then every show I did I tended to end up being the unofficial company masseur. I just had a bit of a knack for it. People used to gravitate towards me and say oh I'll give you a bottle of wine if you do my neck for me and the more I did that people would say, you should train in this, maybe you should do it. So initially I trained in sports massage while I was still working in theatre. So I combined the two for a while and then I just got more and more of a taste for it and I recognized that there was a missing gap in the market for people who really understood the technique behind dancing, singing, playing a musical instrument in terms of being a therapist. People I used to go to they had no understanding of what I did for a living. They could only really treat the symptoms and couldn't get down to the cause. So I decided that I wanted to go into training as an osteopath and to bridge that gap at the market and make sure that every musician that comes into me for treatment they bring their instrument with them. We'd look at how they're playing because the root of their injury normally lies somewhere within their technique and posture. The same with dancers. We pick apart their technique and the same with vocalists. So we get to cause and we just don't fix the symptoms and six months later they're back with the same problem.

**Tim Lightfoot.** Cool and that's great. And we haven't even talked about musicians today but that's certainly part of the whole performing arts. As you think about your career and why you do what you do, do you have any particular success stories that really jump out at you?

**Jenny Morton.** Yeah, I mean my work is an absolute pleasure to sort of help people who come in but clearly performance when they're injured or there's something affecting their ability to perform their craft and earn their living it's a very anxiety producing situation for them. Even a paper cut to an office worker won't make them particularly anxious but a paper cut to an violinist is going to be extremely anxiety provoking. So you're dealing with a different psychology. So, when you help somebody get through this...and a lot of the time my job is about normalizing it for them as well. This might be the first injury they've had or I had a singer who...a singer with a top rock band in the UK and had got to the point where he could barely sing anymore because he just jammed himself up with the muscles around the area and with the technique that he was using. He was very, very anxious when he came in and very upset and worked over a course of a few weeks and unraveled the things that were going on. The voice started to come back and for me a lot of it was just normalizing this [??? 00:24:48] and saying I see this all the time, it's nothing to worry about, we can do something about it. Talking about the voice as being an

organic instrument reflective in emotional space. The anxiety itself was causing part of the vocal issue.

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So just the reassurance and the process of working through and him understanding the organic instrument that he has...most musical instrument players can take their written instrument apart and put it back together again, but most singers have no concept of what this apparatus is that they're using. So giving him the tools to deal with that and allowing the voice to just...to come back and giving him the tools to manage it going forward was a wonderful situation for both of us. For him obviously it was a huge relief and for me just an absolute pleasure to be able to help somebody on that journey and that's why I absolutely love what I do.

**Tim Lightfoot.** So every time you hear him sing you go hey I helped that, right?

**Jenny Morton.** Yeah, yeah and he tells people too. So obviously we have issues of confidentiality when we're treating patients so a lot of the people that I treat we don't...they don't necessarily talk about it. There's a big issue with performers that they don't want other people to know they're injured or having problems because that could affect their hire ability if people know they're injured they oh, well I won't ask them to do this job. It's a word of mouth business. But he's been very great at talking loudly and freely about his journey with me and encouraging other singers to embrace this and to understand their voice better and to learn more about it. And get some regular maintenance treatment. We get our car serviced every year, but the body we tend to leave to get on with it and problems are often accumulative. So if people can just adopt healthy practice routines then they can keep themselves healthier. I'd much rather help keep someone healthy than try and fix them once things have gone wrong.

**Tim Lightfoot.** Right. Jen this has been a fascinating conversation. Certainly I know for our audience this is a different look at performance medicine than probably most of them have heard or seen. Unfortunately we're running short on time and as we do with all of our guests, we wanted to give you an opportunity to tell us your take home message. If everybody that's listening to this is going to remember one thing, what thing should they remember?

**Jenny Morton.** I think speaking to any performers that are listening, the thing to remember that is...your body is an amazing structure. It is capable of the most amazing things to produce the sounds that we can produce, the movements that we can produce but it needs looking after and it needs understanding and if you can take some time to work with a practitioner, really understand the tools that you've got available, you can ensure the health of that structure going forward. You can keep yourself healthy, you can probably even optimize things and improve your performance. And to anybody out there who's not a performer but just interested in it, just to understand that there are people out there who specialize in this and that performing artists are elite athletes even if they're not running great distances or the way they use their body is the same as an elite athlete and they need the care and attention that we devote to sports medicine.



We're out there as performing arts meds and specialists but we need to spread the word and let people know that there's help.

**Tim Lightfoot.** Yeah. We may not normally call them athletes but they really are.

**Jenny Morton.** They really are.

**Tim Lightfoot.** Yeah. Well thank you so much for being with us today Jen. It's been great to have you on the podcast.

**Jenny Morton.** Absolute pleasure. Thank you for having me.

**Tim Lightfoot.** And I want to thank all of you that have been listening for taking the time to download us and listen and for those of you that have been regular listeners of the podcast for awhile you know that it is at this time that we have our podcast question of the week and with that question is our producer, Kelly.

Kelly. What issue arises when combining dance and vocals?