



En Pointe

These podiatrists reveal secrets to treating professional ballet dancers.

BY KEITH LORIA

Anyone who has ever seen a professional ballet performance will marvel at a ballerina's grace and athleticism, as they perform 180-degree turnouts of the legs and dance on full pointe in a toe shoe. With so much importance of the dance placed on their feet, it's no wonder that a majority of ballet dancers will experience some sort of major foot injury in their career and deal with lesser issues throughout their professional life. Ballet dancers suffer for their art, and their feet take the most abuse. That's why most ballet companies have a podiatrist at the ready to make sure that a dancer's lifespan on the stage is as foot-healthy as possible.

Podiatrist Frank Sinkoe has been working with ballet dancers in the Atlanta Ballet for more than a dozen years. He approaches helping ballet

dancers the same way he would any athlete—from a sports medicine perspective. In that respect, he concentrates on core strengthening and foot strengthening to help dancers avoid overuse injuries. "With professional

and metatarsal stress fractures."

Since many ballerinas begin at a young age and their feet not fully developed, problems can arise. Dr. Sinkoe sees lots of bruised nails, infected soft corns, and lateral lesions

"Common occurrences are flexor hallucis tendonitis, posterior impingement of the ankle, and metatarsal stress fractures."—Sinkoe

ballet dancers, they have extensive rehearsals and performances during certain time periods during the year and you see a great deal of problems from overuse," he says. "Common occurrences are flexor hallucis tendonitis, posterior impingement of the ankle,

in teen and pre-teen ballerinas. As dancers hit age 17 or 18, more Achilles tendinopathy and flexor hallucis longus developments occur.

Another common location of pain for ballet dancers occurs around the

Continued on page 84

medial malleolus and develops from the dancer rolling in to obtain proper turnout. This produces a chronic strain of the deltoid ligament of the ankle and the medial structures of the knee and patella.

Dr. Sinkoe says, “The number one reason things like this happen to a ballerina is because they are forcing a turnout on stage. With older ballerinas, fatigue becomes an issue. They could have a perfect turnout but the form is going to start not being as perfect. In ballet, when form starts being affected because of fatigue, the way to compensate is forcing the turnout, rather than turning out at the hip.”



Dr. Novella

When it comes to foot care, the one name that consistently pops up among top ballet dancers and major companies is Thomas Novella, a New York-based podiatrist who has worked with dancers for more than 35 years and has even developed a seminar lab in which elite ballet students learn principles to help maintain healthy feet and ankles throughout their careers. He has been able to extrapolate much of what he has learned from dancers into the non-dance population as well.

He cites a case of a young ballerina who suffered stress fractures in

chines, and in less than six weeks, she was back doing relevé (A movement in which the dancer rises on the tips of the toes).

“Because her stress fractures were at the bases of her metatarsals, which

thing that a podiatrist can help with. Dancers shouldn’t look for a quick-fix themselves.”

For a bruised nail that looks like it may be close to falling off, Dr. Denton recommends icing the toe and ban-

“Pointe work often brings blisters and calluses and this is something that a podiatrist can help with. Dancers shouldn’t look for a quick-fix themselves.”—Denton

occur especially in pas de bourrée en pointe, I advised her to do her rudimentary ballet barre as she would in a flat, not pointe class, but use a dead pair of pointe shoes, rather than ballet slippers, for added support,” Dr. Novella says. “If the stress fractures had occurred in mid-metatarsal shaft, I would have advised her to take a pointe barre.”

Jane Denton, a podiatrist with the Center for Sports Medicine in San Francisco, California has spent the past two decades working with ballet companies around the Bay area. She is often shocked at how many professional ballet dancers don’t consult with a podiatrist, as there are things podiatrists see on a daily basis that can help prolong their careers. “Be-

daging it to protect the nail bed from the pressure of the shoe. If it does fall off, then slipping on a gel toe sleeve for cushioning and protection is necessary.

A number of ballet dancers who visit Dr. Denton also suffer from stress fractures. Some of this has to do with a lack of nutrition, but a lot has to do with overuse—especially during the winter time when the rehearsal and performance schedule for “The Nutcracker” usually has the ballet dancers working overtime.



Dr. Denton

“There are certain cycles during a ballet dancer’s year when there is just a crazy rehearsal schedule and the hours spent on one’s feet, particularly on pointe, can really increase, such as when they do six-hour summer intensive programs or preparing for spring recitals,” Dr. Denton says. “The stress fractures you see are different than what you would see in runners. These are more at the base of the second metatarsal because the weight of being on pointe brings more pressure to the first and second toes.”

When stress fractures happen, often the foot is put into a removable boot to keep the dancers active. Dr. Denton recommends Pilates or Gyrotonics to keep them in dance shape

Continued on page 86

The podiatrist prescribed removable walking casts, physical therapy, and bone stimulator machines, and in less than six weeks, she was back doing relevé (A movement in which the dancer rises on the tips of the toes).

each foot after taking some time off for college, and upon her return, took on a very demanding role as a lead soloist in a NYC production of *The Nutcracker*. The podiatrist prescribed removable walking casts, physical therapy, and bone stimulator ma-

chine of the pointe shoes, there are common problems like bruised nails, corns, infected corns, bunions; everyday issues that I deal with in my job but they may not pay attention to,” she says. “Pointe work often brings blisters and calluses and this is some-

and starts some on a regimen of water-bar exercises, which helps with buoyancy as the resistance of the water keeps the weight off the feet. Stationary bike work also helps a ballet dancer keep tone.

“Once they’ve healed up, usually it will take four to six weeks for them to get back into what they have been doing, and it’s important that they take things gradually,” she says. “They should start with some bar work and they will be determined to get back on stage sooner rather than later, but they can’t.”



Dr. Pribut

Washington D.C.-based podiatrist Stephen Pribut has worked with some of the most famous ballet dancers in companies such as the Royal Ballet, Joffrey Ballet, and National Ballet. He has noticed that more and more dancers are becoming experts in wrapping and taping, and realizing that regular foot care can help them dance longer and safer. Still, he warns, they can’t do everything themselves.

“Dancers are very tough and have a high threshold of pain, and many are known to dance with multiple stress fractures,” he says. “Dancers need to act before something turns into a chronic and troubling malady.” Dancers often

have to undergo surgery to repair fractures, correct bunions, and arthritic joint conditions such as hallux limitus.

Pointe Shoes

A ballet slipper or pointe shoe is made from soft leather, canvas, or satin and has flexible, thin soles. The average life for a professional ballet dancer’s shoes is only

**“Dancers are very tough
and have a high threshold of pain,
and many are known
to dance with multiple stress
fractures.”—Pribut**

about four to six hours, so normally each pair is only good for one performance. The constant changing of shoes is another reason why ballet dancers experience so many problems with their feet.

“When they are in training, the pointe shoes are basically to strengthen their foot muscles so their foot works well,” Dr. Sinkoe says. “If the foot isn’t strong and a dancer is forcing up on her toes, bruises can develop or nails can be damaged.”

Dr. Pribut adds that because ballet dancers jam their feet into tight shoes, they have soft corns and toenail issues.

Up until about 2007, most ballet dancers purchased pointe shoes that were made in London, but over the past seven years, the number of manufacturers turning out proper ballet shoes has increased substantially, and now there are a variety to choose from. “The new ones fit people’s feet better, they are better for those whose feet are wide, with long toes, weak arches, etc.,” Dr. Jane Denton says. “All ballet dancers know the amount of breaking in they need to do for their shoes. They don’t want to break the shank so they can point the shoes more.”

Corns and calluses are necessary for ballet dancers and allow them to bear weight on their toes in the toe shoe, however, when corns become hypertrophied, they will need to be trimmed, preferably with a pumice stone. Ballet dancers usually place lamb’s wool or paper towels in their toe shoes to redistribute the forces within the toe box. If the toe box is made too tough, it takes away their proprioception and “feel of the floor,” which would have a negative impact and cause minor complications such as bleeding or infection beneath the corn can occur. If an infection occurs, it may be best to drain or unroof the corn.

The Male Perspective

Men hoping to be the next Baryshnikov need to be more concerned about back and neck issues because of the amount of time they spend lifting the female balleri-

Continued on page 88

nas; however, there are foot problems they need to be wary of. When they do lift the girls, their feet need to be kept in a turnout position, and this can lead to a ligamentous injury of the first metatarsophalangeal joint.

“Male dancers have different injury patterns and often have higher-up injuries, such as the knee and hip,” Pribut says. “They also experience traumatic ankle injuries. I had one dancer who fell off the platform while going for a bow, and he tore his anterior part of the capsule.”

According to Denton, acute dislocation of the lesser MTP joints is more common in the male than the female dancer because the male’s feet are less protected by the shoes he wears when dancing. Sometimes, this condition often goes unrecognized, perhaps because of the swelling that accompanies the injury in the metatarsal region. The dislocation must be reduced and stabilized so that it can heal.

On Stage

Just as a ballplayer will suffer an injury during a game on a field or court, a ballet dancer will most likely develop an injury during a performance on stage. According to Dr. Denton, one common injury that’s related to the stage is posterior ankle impingement or capsulitis, where the bal-

lerina will get a pinching in the back of their ankle. This is something unique to ballerinas because of the way they point their foot perpendicular to the ground and remain like that. “They think being flexible is most important but

**“When working
with a ballet dancer, a lot of
times you have to go beyond the feet
and look if the patient is getting
adequate nutrition.”—Novella**

strength is more important,” Dr. Denton says. “A ballerina needs to have strong hips, knees, and core.”

Some podiatrists recommend that ballet dancers use a stretch box to stretch their Achilles tendons while they are waiting backstage during performances and rehearsals to limit the incidence of Achilles tendinitis.

Role of Nutrition

Ballet dancers have long been linked to eating disorders such as bulimia or anorexia as they try to keep their bodies as light as possible. This is a problem that not only affects their overall health, but can cause issues with the feet as well. According to many podiatrists, this is something that is seen in ballet dancers more than athletes of any other sport.

“When working with a ballet dancer, a lot of times you have to go beyond the feet and look if the patient is getting adequate nutrition,” Dr. Novella says. “A lot of these dancers are trying to eat light and develop eating disorders, which could lead to bone problems and healing difficulties. The negative caloric intake can lead to more stress fractures, especially in the lower leg tibia and metacarpal.”

Dr. Pribut adds that dancers need to be smart about everything, from nutrition to getting proper sleep to stretching correctly. He warns that ballet dancers who begin on pointe too early—normally before the age of 12—can suffer from foot deformities later in life. “The bones in the feet are still growing at this age, and by 12, most girls are ready to stand on their toes,” he says. “Ballet dancers need to care for their body and feet just as all athletes do. There’s always going to be that drive to want to do more than they probably should, which is why talking with a podiatrist and understanding their limits is important for a long and healthy career.” **PM**



Keith Loria is a freelance writer who has written about everything from baseball to corporate mergers to healthcare, with a little entertainment thrown in the mix. Recent notable interviews include legendary actor William

Shatner, heart surgeon pioneer Dr. Marc De-
domenico and Pez Candy CEO Joe Vittoria.