

Interview with dance specialist Dr. Lisa Schoene

Dr. Lisa Schoene, DPM, ATC, FACFAS, is a triple board-certified sports-medicine podiatrist with a specialty in dance. She treats dancers at every level, from beginners to professionals to teachers, and is an expert at evaluating pointe readiness, teaching injury prevention, and treating injuries that do occur. Based in the Chicago area, she has worked with clientele including Ballet Chicago, The Joffrey Ballet, Hubbard Street Dance and many other companies, studios and athletic teams, and is also a prolific writer, teacher and lecturer on sports and dance medicine. www.DrSchoene.com



How do you evaluate dancers for pointe readiness?

"I look at the dancer's ability to point her feet and to balance in a one-footed pose such as a *passé*. I have her do some jumps to learn more about her strength, placement and balance while moving. To assess strength in her hips and core, I see if she can perform a plank (holding the back straight in a push-up position, resting on elbows) and lower her legs together from a raised position, lying on her back. If she can't perform these exercises, with her abdomen in, her core strength needs to be addressed before I would recommend pointe work."

Should a doctor be consulted before my daughter begins pointe?

"If you know a specialist in dance, and pointe work in particular, he or she might be able to provide valuable information. Without this expertise, a doctor is unlikely to understand what is entailed in pointe readiness or dancing on pointe. The most important person to talk with is the dance teacher. Find out his or her criteria for readiness, and how dancers are evaluated. If you feel you need more information, ask for a referral to a dance specialist."

When are dancers ready to start pointe?

"Readiness is individual to the dancer. Generally, though, the most common age is between 11 and 13. Before age 11 or 12, children are less likely to be neurologically, structurally and mechanically capable of the concentration, **proprioception** (awareness of the body in space) and strength needed for pointe work. Emotional maturity is also important, because they need a solid sense of responsibility to care for their bodies and use pointe shoes correctly. After age 14 or so, it can be more difficult to get started, because the feet may not have made the necessary adaptations that occur during ballet training, from constant stretching and strengthening. Many dancers do begin successfully in their teens, though, and even adults can begin pointe with proper training."

Are pain and damage to the feet inevitable with pointe work?

"Dancers do have to get used to some discomfort from the snugness of pointe shoes and the pressure of carrying the body's weight on the toes. They should not, however, have to suffer significant pain or have their feet deformed. Excellent fitting is essential for keeping the feet healthy. Properly fitted shoes keep feet supported to avoid sinking or **knuckling** (crumpling at the toe joints) into the toe box, and should minimize abrasion and blistering (from the shoe rubbing against the foot). Don't over-pad the toes because thick pads can interfere with the fit and with the dancer's control. I like lamb's wool better than most pads, because it is soft and gentle, it can be molded to fit the contours, nooks and crannies of the toes and to make up for differences in toes' lengths, and it leads to less troublesome wetness than synthetic materials. Dancers should keep their shoes dry and avoid squashing, and they must replace worn-out shoes promptly. In old or misshapen shoes, dancers are more likely to sink, knuckle, **sickle** (roll toward the little toes) or **wing** (roll toward the big toe)."

What should we watch out for during pointe training?

"If your daughter is complaining of pain in her foot or leg, or has bad blisters, damage to the toenails, or redness, swelling or bruising on her feet, she may be having trouble with her shoes or technique. You should be concerned if she becomes unwilling to go to class; pointe work is challenging, but it should be fun if the class is progressing at the right pace with proper technique, in a supportive environment. If you observe class, watch for sickling or winging on pointe, and forced turnout (toes pushed outward so that they are no longer in line with the knees) or over-pronation (rolling toward the big toe) on flat, all of which can lead to injury. On pointe, her body should form a straight, vertical line." (See illustration on page 4.)

How should my daughter take care of her body?

"Young dancers might not understand what an important investment it is to take care of themselves, but I know dancers in their 30s and 40s whose bodies are in wonderful shape because they care for them every day. Encourage your daughter to get plenty of sleep, eat a healthy and nutritious diet and stay hydrated. She should warm up before class and stretch after class. She should avoid forcing her turnout which can lead to serious knee and hip problems as well as bunions and other foot and ankle injuries from over-pronation. Finally, encourage her to do special exercises for the feet and ankles, to augment the work she does in class."

Essential Exercises for the Feet



Dr. Lisa Schoene recommends this set of exercises to every dancer on pointe. Follow the instructions carefully, to help your daughter build the strength to make her pointe experience as safe and satisfying as possible. Keep all movements slow and controlled, in both directions of each exercise. Keep toes extended but relaxed - neither flexed nor strongly pointed - unless instructions specify pointing or flexing the toes. Start with one set of 8-10 repetitions of each exercise, on each foot. As strength increases and the exercises are learned, increase to two or three sets (about five minutes per set). After the exercises, gently stretch feet and ankles.

Equipment: Elastic exercise band (knotted into loop at end), small towel, thin cushion, chair or stool. When possible, perform exercises 1-4 with space below the feet (sitting on a firm bed or elevating the feet slightly off the floor with a firm cushion, not thick enough to put strain on the knees) for better range of movement.

1 Dorsiflexion (flexing the foot upward)

Sit with legs extended forward, one foot resting on top of the other. Wrap band as shown, with end hanging loose. Without flexing toes, flex the working (top) foot at ankle, slowly and smoothly, upward toward the body. Do not move other foot. Return to starting position slowly and smoothly.



Target muscle

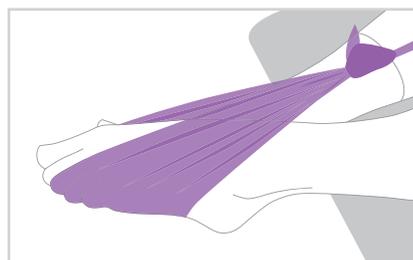
Tibialis Anterior

Importance

Alignment of foot and ankle; control for jumps and pointe work

2 Plantar Flexion ("pointing" the foot)

Sit with legs extended forward. Wrap band as shown and grasp with hands. Without strongly pointing toes, slowly and smoothly extend foot into a "pointed" position (at ankle, not toes) then return to starting position.



Target muscles

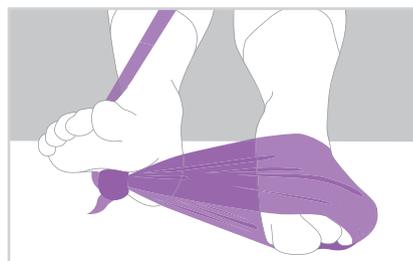
Gastrocnemius and Soleus

Importance

Strength on pointe and throughout dance technique

3 Eversion

Sit with legs extended forward, ankles a few inches apart. Wrap band as shown and grasp with hands. With working foot extended, but not strongly pointed, move foot smoothly outward (to an **everted** position). Move exactly to the side, without changing angle of foot or moving toes. Return smoothly past starting point to fully **inverted** position.



Target muscle

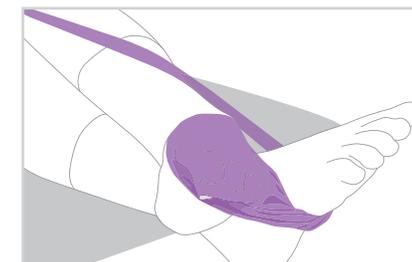
Peroneus Brevis

Importance

Control and stability; avoidance of sickling and winging

4 Inversion

Sit with legs extended forward, with working ankle resting on top of other ankle. Wrap band as shown and grasp with hands. Slowly and smoothly move inward (to an **inverted** position). Keep ankle extended and try not to use toes. Move exactly to the side in relationship to the ankle. Return slowly past starting point to fully **everted** position.



Target muscle

Tibialis Posterior

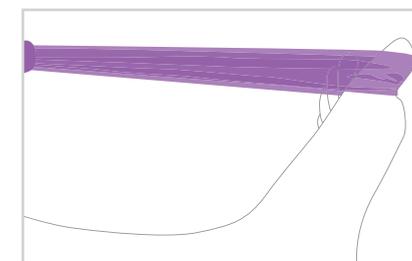
Importance

With eversion, essential for control and stability



5 Pointing Big Toe

Sit with working leg extended and ankle flexed but relaxed. Wrap loop around big toe joint and grasp band with hands. Moving only the toes, point big toe against resistance of band. Then, allow toe to return very slowly to flexed position.



Target muscle

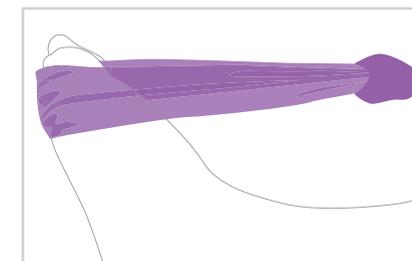
Flexor Hallucis Longus (FHL)

Importance

Stability on pointe; avoidance of over-pronation and bunions

6 Pointing Little Toes

Perform as exercise 5 but wrapping band around the little toes instead of big toe. Sit with working leg extended and ankle flexed but relaxed, and wrap loop around four little toes. Moving only the toes, point against the resistance of the band, then allow toes to return very slowly to flexed position.



Target muscle

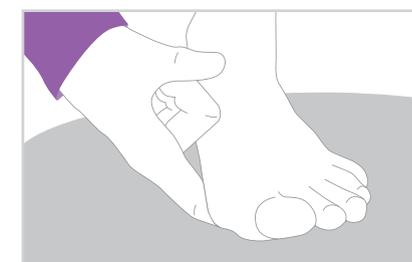
Flexor Digitorum Longus (FDL)

Importance

Overall stability

7 Big Toe Push

Use a chair or stool, with a thin cushion or pillow on top. Stand with working foot on cushion. Do not roll foot in or out, lift heel or change standing position. Push down into cushion with the big toe joint. (The movement of this exercise is mostly invisible, but can be felt with a finger under the toe.)



Target muscle

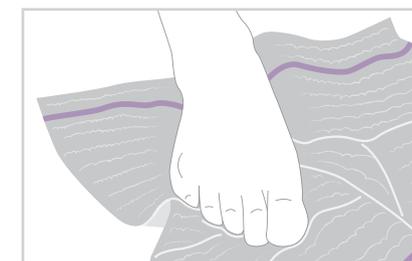
Peroneus Longus

Importance

Strength and control in relevé; keeps big toe functioning properly

8 Towel Curl

Place small towel on floor or exercise table and sit in front of it. Place working foot in middle of towel. Repeatedly grasp and release towel with toes, gradually moving it toward the body. (Picking up objects with toes provides similar exercise.)



Target muscles

Intrinsic Muscles of Arch

Importance

Intrinsics work with longer muscles to flex and point foot, and to maintain stability throughout foot