

Love your feet

Sensible foot care can be the best form of injury prevention. In the first of a series on well-being for the dancer, Tony Geeves jumps in feet first.

DANCERS devote so much time and energy to acquiring technique that they often forget to spend time developing important basic attributes of strength, flexibility and cardiovascular conditioning. As these attributes are necessary for the acquisition of technique, this can create a self-defeating cycle.

In general, injuries occur most often in the first three weeks of resumption of training after a break. As the year wears on, injuries in full-time students are more likely to occur late in the day (about four o'clock). This is often attributed to tiredness due to lack of cardiovascular fitness. The brain is not getting enough oxygen, the attention relaxes and accidents happen.

Taken together, ankle and foot injuries are more common than knee injuries in the vocational dance student, accounting for 26 per cent of all injuries. The ankles often have to deal with five to eight times the body's weight, which is transmitted through the feet and legs when landing from jumps.

To help prevent injury to these areas, the muscles of the calf need to be stretched regularly — before, during and after each practice session. This applies particularly to the Achilles tendon, which is non-elastic and if ruptured can end a dancer's career. If an injury does occur in this (calf) muscle group it is important to seek medical attention early. A wobble board in the dance studio is effective for both stretching the Achilles (used on an angle), and as a prevention and rehabilitation tool for ankle injuries, and is especially useful in correcting rolling and sickling. Some form of professional guidance is essential for the most successful results.

Dance Shoes

The question is often asked: 'What is the main difference between foot injuries sustained by modern dancers and by ballet dancers?' Well, both share stress fractures, ankle sprains and tendonitis. The difference is that most modern dancers' injuries are caused by the lack of protection of shoes, whereas most ballet injuries are caused by the constriction of

the shoes or the technique associated with wearing them.

You will notice that the subject of poorly fitting footwear, tights/stockings and socks will be mentioned often through this article in connection with different types of injury. This is an indication of the importance of proper footwear and applies to all kinds: ballet flats, pointe, tap, character, flamenco or Spanish as well as street shoes.

Before I move on to common injuries, I must stress the importance of warming up. It cannot be said too often that warming up and warming down, together with good cardio fitness and stretching, are the beginning and the end of effective injury-free training.

Common problems

Blisters

These nasty little things are one of the most common problems for dancers. Blisters are a separation of the outer layer of skin that fills with a watery fluid or blood.

Constant pressure and friction on a particular area leads to a feeling like a hot spot. If the pressure is removed at once the blister won't form. A simple solution, such as a covering (bandage/moleskin), will reduce the friction and allow you to continue training.

The most common cause of blisters is improperly fitting tights, socks or footwear. When training barefoot the floor surface adds to the problem and the friction usually occurs with twisting movements, which disrupt the skin layers. Perspiration can also add to mix as moisture increases friction. When changing footwear, dry your feet properly, use powder and wear natural fibre socks.

Puncturing blisters should only be done if they are painful. Blood blisters should not be self-treated; it is better to consult a medical practitioner. To treat a water blister yourself, clean the area with an antiseptic, sterilise a needle, let it cool and then make a small puncture at the outside edge. Drain the fluid and leave the blis-

tered skin intact, as it is the best protection. Seek professional help if an infection occurs. If you have a history of blisters petroleum jelly can reduce friction.

Bunions (Hallux Valgus)

Bunions are an overgrowth of bone that can form on the head of the first metatarsal or on the outside of the foot on the head of the fifth metatarsal, then referred to as a Taylor's bunion or Bunionette.

This overgrowth causes inflammation, tenderness and/or enlargement of the big toe. Bunions are an overuse injury often caused by rolling and aggravated by poorly fitted shoes. They can be extremely painful and in some cases lead to a limited range of motion of the joint.

Seek medical advice as soon as possible. The first step should be to take a close look at the individual's natural build (such as turn-out), and the way they stand and move, especially in training.

Calluses and corns

Both calluses and corns are a build-up of the skin as the direct result of pressure, stress or friction, usually from inadequate or maladaptive dance shoes or poorly fitting footwear. Calluses form in a straight pattern similar to the natural skin lines. Corns are conical or circular in formation. Neither are dangerous in themselves when cared for, and a superficial callus should not be removed. As the dancer's feet are the area of the hardest work some calluses are to be expected. However, it is important to keep them clean and dry, pare them down and sand them off as they thicken. Use donut shaped padding and taping for protection. It is never a good idea to use razor blades or scissors to cut the hard skin, because of the risk of accident. Remember that when you take a break the feet soften, so a gradual return to full training is important.

Use a commercial un-medicated corn pad as medicated pads can lead to burns and subsequent infection.



Soft corn

A soft corn is the same as a hard corn except that it forms between the toes and is therefore constantly moist and more difficult to treat than a hard corn. To treat, separate the toes, insert a ball of lamb's wool and keep the area dusted with astringent powder. If this doesn't work, then you may need to see a professional, such as your doctor or a podiatrist. When dancing, squeeze a glob of Vaseline between the toes and pack in as much lamb's wool as possible.

A soft corn is usually the result of shoes that are too narrow across the toes.

Ingrown toenails

This is when the inside corner of the nail, usually on the big toe, grows into the skin, often the result of improper or ill-fitting footwear and/or tights.

Another common cause is the way the nails are cut. Cutting into the corner of the nail may leave an edge that grows into the skin. It is best to cut straight across in order to avoid ingrown toenails.

If you feel unconfident about treating the nail yourself, see a professional.

Treatment begins with a warm soak and Epsom salts then learning the proper care of nails and how to trim them correctly, as well as a method of packing under the nail edge to help it grow in the direct and correct course.

Fissures

Fissures are cracks that occur in the skin and are caused by excessive dryness. Keeping the feet moist with moisturising cream and skin lubricants except before dancing is the best method of prevention. Once a crack appears, keep it clean and use antiseptics, then apply an antibiotic ointment and cover the area with a bandage. If you keep getting fissures, a moleskin or tape over the affected area reduces friction and the chance of re-occurrence. Make sure you protect the skin first with a covering zinc oxide ointment.

Sprains and strains

A sprain is an injury to a ligament — non-elastic tissue that connects bone to bone, adding stability. This is a traumatic injury and sprains are usually classi-

fied into three grades. A primary sprain is when there is no actual tear in the ligament and so no instability of the affected joint, and causes mild to minimal tenderness. Next is a complete or partial tear of the ligament which results in moderate instability. The pain is moderate, the area turns black and blue and the foot can't take weight. The most severe sprain is a complete tear of the ligament, making weight bearing impossible.

You can sustain a sprain just by landing from a jump with the foot sickled inward, falling off a shoe or simply tripping over and putting the weight on the outside of the foot. The majority of sprains to the ankle are when the foot rolls in. They are more common for the highly arched and normal type foot. Sprains caused by the foot rolling out are more common for the pronated (non-aligned with knee, ankle, toe) foot.

Tendonitis

Tendonitis is an inflammation of the tendon caused by overuse, an accident, functional imbalance or a combination of these. To minimise the chance of tendonitis, it is important to maintain flexibility by stretching and to warm-up and cool-down effectively.

Begin treatment with rest, ice, compression, elevation and diagnosis (RICED). Strapping will help support the joint and heat is recommended after 48 hours. The most difficult thing for the dancer is to rest the injury.

Remember 'relative rest' — other forms of non-weight exercises can be performed to keep your fitness.

Conclusion

If you are to survive the rigours of dance training, it is important to find a balance between the time spent in technique classes and the time spent maintaining flexibility, strength and cardiovascular fitness. Taking care of your feet should be on the top of every vocational dancer's list.

This article is far from comprehensive and needs to be read only as a guide into a vast subject of the dancer's feet. *The Dancer's Foot Book — A Complete Guide to Foot Care* by Dr Terry Spilken (published by Princeton Book Company in 1990) is a must for the library of all responsible dance schools.

Tony Geeves is a former professional dancer and university lecturer, author of 'Safedance' 1 and 2 and the winner of an Australian Dance Award for services to dance. He is presently the co-director of Pilates and Physio on Collingwood in Brisbane.