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TCM Treatments for Injured Dancers

Yan Yew Wai, January 2022

Injuries in dancers

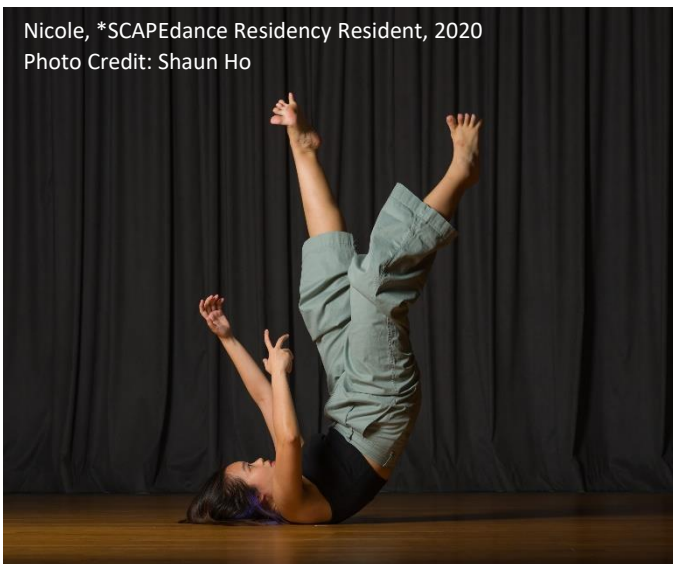
Dance training and performance puts the body under considerable physical stress. Physiologic demands of dance, especially during performances, approximate that of sports with aesthetic elements such as gymnasticsⁱ. To stay performance-ready, dancers often engage in long hours of daily practice followed by rehearsals. In addition, the training load increases during performance season, which results in fatigue and furthers the risk of musculoskeletal injuries. Multiple studies have shown that dance-related injuries were present in slightly more than half of the dancers surveyed^{ii,iii} and these injuries are not dance genre specific. It is thus important to look into how to help injured dancers better recover. The local dance community is supported by doctors, allied health professionals, and dance science educators in preventing and managing injuries. Still, it is always good to keep an open mind and explore different ways

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to help dancers with injuries. This article looks at how traditional Chinese medicine (TCM), backed by multiple studies to be effective in pain management^{iv}, can be a viable therapeutic option for injured dancers.

How do injuries and pain occur from a TCM perspective?

Dance-related injuries are mostly musculoskeletal and are categorised into two types - chronic and acute injuries. Chronic injuries have a gradual onset and usually result from overusing one body area (long hours



Nicole, *SCAPEdance Residency Resident, 2020
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of practice and repetition of dance sequences). In contrast, acute injuries occur suddenly and are often associated with traumatic forces such as clashes, falls, sudden sprains and strains. Regardless of chronic or acute injury, pain and swelling are usually present, and in TCM, this is a result of obstruction of Qi and Blood¹. When left untreated, stagnation in Qi and Blood can give rise to more pain and tightness and even spread to bigger areas, resulting in more pain over time. Besides training-related causes such as overuse and trauma described above, Qi and Blood stagnation can also result from the following:

- 1) external influences such as exposure to environmental elements, especially Wind, Cold and Dampness, can give rise to stiffness and pain
- 2) internal causes such as imbalances and deficiencies within the body that might predispose the body to have weak and tight soft tissues, resulting in a greater tendency for injuries to occur

To put it simply, TCM considers the structural imbalance and soft tissue damage in injuries and emphasises the human body as an integrated whole, which is in an intimate relationship with our natural environment. Both the internal environment (within the body) and the external environment play a part in an injury.

¹ In TCM, Qi and Blood are fundamental substances that make up the human body, necessary for vital body processes

For example, a person who has a strong constitution with sufficient Qi and Blood (strong immune system, muscles, and good flexibility) will be less affected by environmental changes and more resilient to injuries.

In contrast, a person lacking Qi and Blood is likely to be more afraid of cold, prone to sprains and strains, and injuries usually take longer to heal. Therefore, the aim of TCM treatment in injuries is more than just stopping the pain and promoting recovery. TCM also seeks to rectify underlying imbalances within the body, remove undesirable factors which cause Qi and Blood stagnation and prevent recurrence of injuries.

TCM treatments for injuries

Injuries in dancers may occur at any part of the body. The table below is a compilation of some dance genres and common injury sites (information obtained from other dance science articles available on *SCAPE):

| Dance genres and common injury sites | |
|--------------------------------------|---|
| Contemporary dance | Lower back and knee |
| Ballet dance | Foot and ankle |
| Street dance and breakdance | Shoulder, elbow, forearm, wrist, lower back, hip, knee, shin, ankle, and foot |
| Traditional Malay dance | Lower back, hip, groin, knee, shin, ankle, and foot |
| Traditional Chinese and Indian dance | Neck, shoulder, lower back, hip, groin, knee, shin, ankle, and foot |

A systematic review of dance injuries points towards a high prevalence and incidence of lower extremity and back injuries, with soft tissue and overuse injuries predominating^{vi}. These soft tissue injuries may involve muscles and tendons, joints, ligaments, and bones.

Depending on the injury's nature, severity, and location, some injuries are quick to recover while others are slow to heal or tend to be recurrent. TCM treatments such as acupuncture, cupping, Tuina, and herbal medicine are often combined to reduce pain and facilitate healing.



Rui Min, *SCAPEdance Residency Resident, 2020
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Acupuncture

Acupuncture is a TCM treatment method that involves the insertion of fine, thin, sterile needles into specific points of the body (acupoints) to elicit therapeutic responses. Nowadays, acupuncture has gained wide acceptance as an effective form of pain management. Acupuncture typically increases blood circulation to the area, promotes elasticity of muscle fibres and improves muscular contractility. The aim is to clear meridian blockages and correct imbalances within the body so that self-healing can take place. Scientific studies have also shown that stimulating acupoints can trigger the release of endorphins (chemicals produced by the body that relieve pain). Pain is numbed when endorphins are released, and blood and oxygen flow to the affected area increases. It causes the muscle to relax and promotes healing. In addition, acupuncture also reduces

tightness in the fascia, improves movement range, and potentially treats every body part, ranging from muscles and fascia to tendons, ligaments, and joints.

Cupping

Cupping is a TCM treatment modality widely accepted, especially for those afraid of needles. It involves placing "special cups" of different sizes at certain parts of your body using a vacuum. It has shown to be most helpful in relieving fascia and muscle tightness and helps with pain, inflammation, blood flow, and relaxation. In a systematic review of 611 studies, cupping therapy positively affects chronic back pain^{vii}. Despite its popularity, there are some limitations of cupping: Cups can only be placed on fleshy, less hairy parts of the body such as the neck, back, shoulders and knees (above the knee cap and at the inner and outer part of the knee or behind the knee), and there might be a red or purplish "bruised mark" left on the skin after cupping, and those marks can stay for days up to weeks.



Haruka, *SCAPEdance Residency Resident, 2020
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TCM Tuina massage

Tuina (translated literally as "pushing" and "grasping") is a Bodywork Therapy used in China for at least 2,000 years. It is a blend of rhythmic manipulation and pressure of the soft tissue along the body's meridians and at specific acupuncture points^{viii}. When done correctly, Tuina can loosen the fascia, reduce muscle tension, improve circulation, increase range of motion and is effective in nerve regulation. Tuina plays a role in rehabilitation and effectively treats muscles, tendons, and ligaments. It is great in addressing acute and chronic pain in the following areas:

- Neck, shoulder
- Back, hip
- Shoulder
- Leg, ankle

Herbal medicine

As mentioned previously, Qi and Blood stagnation is important pathology for underlying injuries and pain in TCM. Blockage of meridians by Wind, Cold and Dampness, deficiency in Qi and Blood also give rise to stiffness and weakness in the body, making injuries more likely to occur and harder to heal. On this note, TCM often uses a combination of herbal ingredients which promote blood circulation and eliminate stasis^{ix} to nourish joints and facilitate the flow of Qi and Blood. For example, TCM herb San Qi (Scientific name: *Panax notoginseng*; Chinese name: 三七) is known to eliminate blood stasis and, therefore commonly used in traumatic injuries to reduce swelling and relieve pain^x. Injury-prone individuals with Qi and Blood deficiency with signs and symptoms such as pale complexion, shortness of breath, irregular or painful menstruation might benefit from herbal concoctions such as Eight Treasure Soup (Ba Zhen Tang; Chinese name: 八珍汤) which tonifies Qi and Blood. It helps to improve the constitution and reduce the recurrence of injury.



Romaine, *SCAPEdance Residency Resident, 2020
Photo Credit: Shaun Ho

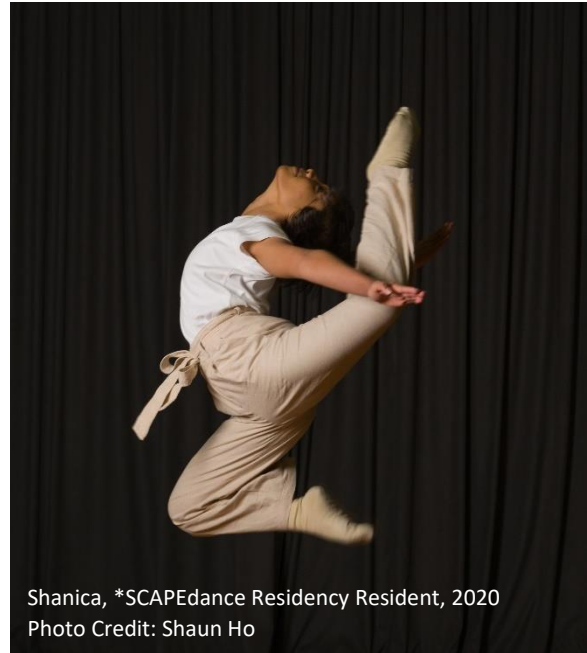
In general, herbal medicine can be administered to the body either topically on the injury sites (such as ointment, cream, or plaster) or taken orally (in the form of tablets, pills, or concoctions).

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TCM tips for recovering from musculoskeletal injuries and preventing recurrence of injury

While the training load, intensity, and environment contribute to the occurrence and recurrence of injuries in dancers, in TCM, we believe that undesirable lifestyle habits can also lead to tight muscles and fascia, which aggravates the pain and dampens the recovery rate. Here are some tips that might be useful in the prevention and recovery of injury:

- 1) Get sufficient sleep and rest: It is important to avoid late-night sleep as it causes your muscles to be stiff and easily strained. It may also cause you to be irritable and have dry throat and constipation, typical signs, and symptoms of *Yin* deficiency and heatiness.
- 2) Avoid training in an excessively cold environment (try to keep the temperature above 24°C) or with a fan blowing directly at you: Acute muscle strains are more common under exposure to cold and wind because muscles tend to be stiffer.
- 3) Eat food to improve your constitution: Most people usually do not associate a poor diet with pain. However, diet and nutrition play an integral part in determining pain from a TCM perspective. A malnourished body will have weaker muscles that are less resilient and more susceptible to fatigue and injury. Therefore, it is important to have regular eating habits and a well-balanced diet beneficial in strengthening digestive function and fortifying your fundamental substances such as Qi and Blood.
- 4) Perform simple DIY acupressure or massage: DIY acupressure or massage can be as simple as pressing and kneading body parts that feel ache and soreness post-training. Pressure need not be hard as the aim is to loosen up fascia, release muscle tension and promote Qi and Blood circulation.
- 5) Avoid being sedentary in one position for too long: Staying in a position for a prolonged period without moving results in stagnant Qi and Blood (slows down circulation) and causes muscle stiffness and weakness.



- 6) Adopt and maintain good posture during daily activities: Be mindful of your posture when standing, sitting, or resting. Holding your back or neck in an awkward position for a prolonged period causes muscle imbalance, making it easier for muscle strain to occur.
- 7) Perform regular stretching and exercise to stay in shape: Besides warm-up and cool-down exercises, one should stretch daily, focusing on tight body parts. A strain is less likely to develop if the muscles are strong and healthy.

Tips on choosing TCM practitioners for treatment

TCM physicians in Singapore are regulated by TCM Practitioners Board (TCMPB), a statutory board under the Ministry of Health, and all licensed TCM physicians can be found using the "Search Registered TCM Practitioners" in the website <https://www.healthprofessionals.gov.sg/tcmpb/en>

End



Mr Yan Yew Wai graduated from Nanyang Technological University with a Double Degree in Biomedical Sciences (1st Class Hons) and Traditional Chinese Medicine in 2012 and is currently working in TTSH Complementary Integrative Medicine Clinic. In the course of his work, Yew Wai has helped many of his patients with their pain conditions using TCM methods such as acupuncture, cupping, and dietary advice. He believes that with appropriate treatment and care, most acute injuries are able to heal well. Chronic injuries on the other hand have a tendency to recur and requires strengthening of the injured individual in addition to usual treatment.

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