

THE RESEARCH OF

THE PREVENTION AND HEALING FOR

THE INJURIES IN DANCE

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Abstract

The injuries can be detrimental to dancers, which may even end their career. The objective of this study is to answer the question will it be possible to formulate a self-programmatic proposal to prevent the dancer himself from the injuries within a syncretic framework.

To answer the above question, I will first present the result on research carried out based on knowledge of Traditional Chinese Medicine (TCM) as well as traditional Chinese dances; discuss and identify key injuries and propose an educational program to avoid it. Next, I will contemplate the knowledge of Chinese medicine as means of recovery without undergoing the risk of permanent action limitation.

The first part of the study is to elaborate an introduction on the necessity of study injury prevention in dance and the value of such knowledge on the formation of dancers. Secondly, a methodology discussion on what should be done and how to do it will be presented by introducing some concepts of traditional Chinese medicine e.g. Yinyang and Massage - Tuina and Qigong , as well as traditional Chinese dances related concepts such as Shenyun. Thirdly, methods of Chinese body work (Chinese dance folclória) and medicine (traditional Chinese foot massage) is analyzed to prevent injuries in dance forms. Finally, the programmatic proposal could be concluded in the training of dancers.

In summary, I intend to reinforce the idea of TCM, looking the human body as an organic whole in which its constituent parts are inseparable in structure and are interconnected and interdependent in physiology (Chunpeng Yao , 2010) . The notion pathology injury would be treated as something that is part of the dancer's activity, created by the body itself rather than a threat. The purpose is to contribute to the creation of pragmatic knowledge and alternative health strategies, which enable self-empowerment, and self-alienation of the body in future.

Keywords:

Dance injuries, Traditional Chinese medicine (TCM), Yinyang, Massage-Tuina, Self-massage, Qigong, Tai Chi, Traditional Chinese dances, Shen Yun, Chinese folk dance, Traditional Chinese foot massage

Abstrato

As lesões têm um efeito muito prejudicial nos dançarinos podendo mesmo acabar-lhes com carreira. A questão de partida deste estudo é a seguinte: no interior de um quadro sincrético de saberes ligados à medicina chinesa será possível formular uma proposta programática que leve a que o próprio bailarino seja o agente de prevenção das suas lesões?

Para responder a esta questão, em primeiro lugar, apresento os resultados da pesquisa elaborada sobre conhecimentos de medicina tradicional chinesa (TCM) e também sobre danças tradicionais chinesas para, a partir deles, discutir e identificar as principais lesões e propor um programa pedagógico de evitamento das mesmas. A proposta desta tese é, então, contemplar saberes da medicina chinesa como meio de recuperação sem correr o risco de ficar com limitações permanentes.

Na primeira parte deste estudo é elaborada uma introdução sobre a necessidade de estudar a prevenção das lesões na dança bem como o valor que este tipo de conhecimento pode ter na formação dos bailarinos. Na segunda parte apresento uma discussão metodológica, sobre o que deve ser feito e como fazê-lo. Para o efeito, são apresentados alguns conceitos da medicina tradicional chinesa, como Yinyang e a Massagem – Tuina e Qigong, bem como conceitos ligados às danças tradicionais chinesas, como o Shenyun. A terceira parte deste estudo analiso e discuto alguns métodos chineses de trabalho corporal (Dança folclórica Chinesa) e medicina (Tradicional Chinesa Massagem nos pés) enquanto formas possíveis de ajudar a prevenir as lesões na dança. Por último, apresento a proposta programática que poderia ser incluída no treino dos bailarinos.

Em suma, pretendo com este estudo reforçar a ideia de que de que também na dança a TCM, que olha o o corpo humano como um todo orgânico em que suas partes constituintes são inseparáveis na estrutura e estão inter-relacionados e interdependentes em fisiologia(Chunpeng Yao, 2010)., pode dar um outro entendimento à noção patologia A lesão seria então assumida como algo que faz parte da atividade do bailarino, criada pelo próprio corpo, e não como uma ameaça. Viso, no futuro, contribuir para a criação de saberes pragmáticos e estratégias alternativas de saúde que, por sua vez, possibilitem o self-empowerment e a desalienação do autoconhecimento do corpo.

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Part 1 Introduction

The reasons Why I chose to research of the prevention and healing for the injuries in dance.

In the first part of this paper, an introduction about the motivation of this research was made, which is hoping to prevent and heal the injuries in dance. It is necessary and very important to a professional dancer.

Chapter1 Overview

1. Dancing, Dancer and Aesthetic demands

Dancing is one of the most demanding of physical activities, as it combines athletic performance and aesthetic values.(Hincapie , Morton, & Cassidy, 2008) Dancers are artists who are athletes. And athletes who are artists.(Brinson, Dick 1996, 13) Over the decades, the demands of dance have required dancers' bodies to stretch farther, move faster, sustain longer, release quicker, jump higher, and land with much greater forces. All of us who watch dance must be aware of the consequences of our aesthetic demands, whether it be for athletic sequences, for unnaturally idealised versions of slimness and youth,or for a constant diet of novel movement which explores the limits of human capability.(Brinson, Dick, 1996)

2. Wide rage of Dance Injuries

Dance , especially theatrical or concert dance, often places extreme and unusual demands on the body (Arnheim, 1991). The rigours of dance practice lead to many common overuse injuries unique to dancers (Kadel, 2006; Motta-Valencia, 2006) A little over half the injuries (55%) occurred in children practicing classical dance: ballet, jazz, tap and modern, though about 40 percent of the injuries were among teens aged 15 to 19. Most of the injuries (58 percent) were also in the lower half of the body, with sprains and strains comprising about 52 percent of the injuries overall.A recent study found that dance-related injuries have been rising over the past decade and a half or so . Regardless, the number rose about 37 percent over that time, from 6,175 dance-related injuries in 1991 to 8,477 in 2007. (Haelle - February 17th, 2013)

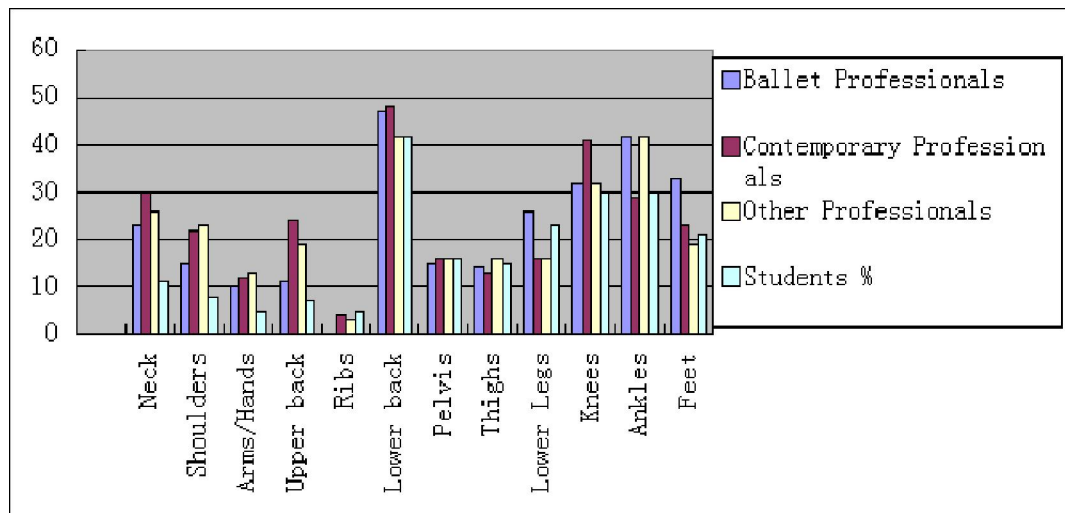
Screening for Common Dance Injuries

Anatomical Sites of Injuries

Dance injuries most commonly occur in the lower extremities(52%), back(22%), and neck(12%)(Evans et al. 1996; Garrick and Reque 1993) In the lower extremities, ankle and foot problems and most prevalent, followed by the knee and the the hip. Many of these injuries are considered preventable.(Evans et al. 1996). For the ballet and other dancers this was followed by ankles, feet, knees and lower legs, while for contemporary dancers the next most affected sites were knees, neck, ankle and upper

Type	Ballet Professionals %	Contemporary Professionals %	Other Professionals %	Students %
Neck	23	30	26	11
Shoulders	15	22	23	8
Arms/Hands	10	12	13	5
Upper back	11	24	19	7
Ribs	negligible	4	3	5
Lower back	47	48	42	42
Pelvis	15	16	16	16
Thighs	14	13	16	15
Lower Legs	26	16	16	23
Knees	32	41	32	30
Ankles	42	29	42	30
Feet	33	23	19	21

Table 1: Sites of injuries (some dancers)



back. The pattern differed between the sexes, with 42% of males reporting injuries to the lower back compared with 34% females. Rates for knees were very similar but thereafter females were most injured in the feet (18%) and lower legs (17%), while males were most injured in the shoulder (26%) and neck (23%), reflecting perhaps the greater amount of lifting that is required of the male dancer. Students reported fewer injuries than professionals to neck, shoulder and upper back, probably because they are not yet being required to take weight in the same way. In corroboration of these findings, respondents to the management survey gave the most frequent sites of injuries as lower back, ankles, feet and knees. (Brinson, Dick, 1996)

Type of Injuries

Sixty-one different types of injuries manifested in the current study and were later classified into seven major categories: knee injuries, tendonitis of the ankle or foot joints, back injuries, bone fractures, joint sprains, stress fractures, and non-categorized injuries. (Steinberg N, January 1st 2011)

Many Factors May Promote Injury in Dancers:

- Extending joint range of motion for better performance. It has recently been shown that passive joint range of motion is unlikely to improve with age (Steinberg et al., 2006). Nonetheless, young dancers exert considerable physical effort to increase joint range of motion through intense stretching training, which can eventually lead to injury (Askling, Saartok, & Thorstensson, 2006).
- Controlling growth. Many young dancers try to develop a “fitted” body structure for dancing; they may restrict caloric intake, maintain such an extremely low body weight that their muscles and bones are affected, contributing to the risk of injuries (White, Philpot, Green, & Bemben, 2004).
- Type of exercise. Young dancers should start dancing en pointe only when finishing their physical development, when their trunk, abdominal, and pelvic muscles (“core” stability) are sufficiently strong for correct posture, and when their leg alignment, strength, and flexibility are adequate (Weiss, Rist, & Grossman, 2009). As the duration and frequency of practice for young dancers are limited, and young dancers have less muscle strength and low coordination, most dancers should start dancing en pointe only after the age of 12 (Hardaker & Erickson, 1987). Unfortunately, even young dancers with no aspirations to become professional practise en pointe (Nunes et al., 2002), most of them become candidates for injuries.
- Re-injury. Adolescent dancers (13 - 16 years) are more prone to repeated injuries than young dancers (8 - 12 years). Adolescent dancers do not abstain from practice following an injury; very few seek medical treatment; they underestimate the time required for recovery and, together with their higher pain threshold (compared with young dancers), expose themselves to re-injury (Askling, Lund, Saartok, & Thorstensson, 2002).
- Time between first and second injury. The time between first and second injury gradually decreases with age. Limited data are available regarding the gap between injuries in dancers. Yet, most follow-up studies suggest that past injury greatly increases the risk of future injury (Wiesler et al., 1996; Bronner & Brownstein, 1997). Askling and colleagues (2006) recently suggested that one of the predisposing factors for re-injury is dancers’ self-confidence. According to these authors, this mental condition arises from the gap between the objective condition of the dancers’ muscles and joints (which had already returned to their normal level) and their subjective feeling regarding their fear of returning to full dancing activity, following their past experience. Nonetheless, the findings of Askling and colleagues (2006) should be treated with caution, as they are

observational rather than causal. Furthermore dancers are known to have low self-confidence because of the subjective nature dance.

- Reluctance to seek help. Most dancers do not seek medical attention for their injuries, and continue dancing with chronic injuries for fear of losing their position in the dance company and the belief that it will end their career (Byhring & Bo, 2002).
- Perceived Causes

Dancers agreed that by far the major cause was fatigue/overwork. And Ballet dancer then cited unsuitable floor, while the other professional dancers were more concerned about cold spaces, repetitive movements and ignoring early warning signs. The musical theatre dancers suggested that warmer studios and theatre would be the most useful means of injury prevention. However, the manager when asked about factors for injury prevention, focused on the dancers' taking responsibility for their own bodies, citing the need for more education about such matters as warming up, proper stretching and care of the body. (Brinson, Dick, 1996)

Perceived Causes

Cause	Ballet Professionals %	Contemporary Professionals %	Other Professionals %	Students %
Fatigue/ Overwork	57	60	61	52
Unsuitable Floor	47	37	16	1
Repetitive Movements	38	45	23	19
Cold Environment	37	36	29	1
Ignoring Early Warning Signs	23	34	45	34
Insufficient Warm Up	15	25	16	21
Difficult Choreography	14	29	13	9
Partnering Work	12	18	3	9
Psychological	9	15	13	12
Different Choreography	7	6	negligible	1
Inadequate Diet	4	9	13	8
Other	28	22	32	36

Table 2: Perceived Causes (some dancers)

➤ Others factors:

Fully 36% of female dancers and 40% of male dancers admitted to smoking; Almost three-quarters of the dancers took some alcohol, but mostly within safe limits, 15% said they were on a diet and 61% were taking vitamins; One-third said they had obtained advice on nutrition from a magazine or TV programme on particular high-energy requirements of a dancer; Students were more likely to have received some nutritional guidance from a teacher (Brinson, Dick, 1996).

3. Adverse Consequences

As artists, we have a tendency to ignore most non-disabling injuries because we have a yearning to grow in our craft. Until recently, dancers have sadly neglected to learn proper prevention and management of their injuries (Arnheim, 1991). Most dance injuries are relatively chronic compared to the usual acute sports injuries. The lifespan of performance careers has shortened due to injuries that have forced dancers into retirement in their thirties and forties—much younger than the average population retirement age of sixty-five. Most dancers find themselves searching for a second career due to disabilities resulting from intense, yet short-lived, dance career. Given this history, it is not surprising that dancers have developed fear and frustration with the efficacy of the medical art in relation to dance.

4. Current Situation

As everyone know, screening procedures serve an important injury-prevention function and contribute to a longer and stronger dance career. In recent years, the areas of dance medicine and dance science are beginning to emerge. But, poverty and ignorance of body sciences have also been factors in turning dancer away from established medicine and science as a means of diagnosis, treatment, and prevention of injury (Clarkson, Skrinar1988).

➤ Treatment received

Contemporary and other dancer were as likely to consult an osteopath, while ballet dancer mainly turned to a physiotherapist, and had better access to massage. The management survey showed substantial agreement with this pattern and most of the ballet companies have a regular arrangement with a physiotherapist, often with on-site access. Ballet dancers were also twice as likely to be referred to specialist. Other dancers were as likely to see a GP¹ as physiotherapist which may well be a reflection of their financial situation. In Caroline Kichin's survey of musical theatre dancers, 65% went to a physiotherapist, 39% to a GP and 2% to an osteopath.(Brinson, Dick, 1996)

¹ A GP is a physician who provides general primary and preventative care.

	Ballet Professionals %	Contemporary Professionals %	Other Professionals %	Students %
Physiotherapy	78	52	39	55
Osteopathy	47	51	42	34
Massage	46	30	26	23
GP	9	16	39	23
Consultant	23	12	10	17
Acupuncture	14	21	16	4
Chiropractic	11	12	13	6
Counselling	negligible	3	3	3
Other	5	7	16	11

Table 3: Treatment received (some dancers)

➤ Paying for treatment

Most of the contemporary dancers had to pay for themselves, with very few being covered by insurance.(Brinson, Dick, 1996)

	Ballet Professionals %	Contemporary Professionals %	Other Professionals %	Students %
Self	49	72	65	35
NHS ²	5	11	35	20
Insurance	32	6	negligible	20
Employer /School	27	14	10	26

Table 4: Paying for treatment(some dancers)

Chapter 2 Compare

2.1. Different Ways

Several Ways In the United States of America and In United Kingdom

In recent years, dance medicine has become increasingly separate from the traditional sports medicine culture. As dance injuries are being evaluated and studied from many different medical perspectives. Treatment should always start with prevention. Screening the dancer's biomechanics, flexibility and strength is essential. Schoene, January 2005) By prevention is meant taking certain measures to avoid the occurrence and progress of diseases. In a performing art the value of dance medicine and science is seen mainly in terms of self-preservation (injury prevention and repair) (Clarkson, Skrinar1988). Tara Haelle said: "Injury prevention strategies may include educating the dancer and instructor on the importance of hydration, stretching, proper

² The four publicly funded healthcare systems in the countries of the United Kingdom, may be referred to as the National Health Service (NHS)

warm up and technique and adequate rest and recovery.”(Haelle - February 17th, 2013)
 Other people feel that “Dancers need to have an in depth knowledge of their own body and how it responds to certain types of training. Anatomical knowledge serves us not only in injury prevention but in full recovery from injury as well. Most injuries in contemporary dance occur as the result of a breakdown in a movement pattern, so it is important to know these and what specific muscles are involved in order to get back to full function.”(Lisa Howell 2007)

All in all, several traditional ways in the United States of America and In United Kingdom to decrease the injury in dance training is based on the analysis and research from biology, anatomy and physiology. Dancers need to have an in depth knowledge of their own body and how it responds to certain types of training.

Some of Universities and Some Dance Companies of Shanghai

They are not only based on the analysis and research from biology, anatomy and physiology, but also use Traditional Chinese medicine (TCM).

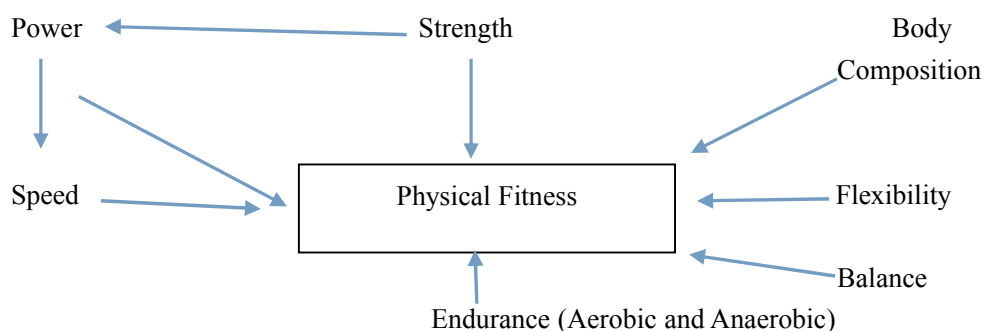
TCM has a history of several years. Its origin can be traced back to remote antiquity. In a long course of struggling against diseases, TCM evolved into a unique and integrated theoretical system of TCM. It is an important part of Chinese culture. It is one of China's splendid cultural heritages, is the science dealing with human physiology, pathology, diagnosis, treatment and prevention of diseases. Major theories include those of Yin-yang, the Five Phases, the human body Channel system, Zang Fu organ theory, six confirmations, four layers, etc. TCM practices include treatments such as herbal medicine, acupuncture, dietary therapy, Tui na and Shiatsu massage; often Qigong and Tai Chi are also strongly affiliated with TCM.

2.2. What is Physical Fitness And What is Fitness for Dance?

One Opinion

Physical fitness may be defined as “the individual’s ability to meet the demands of a specific physical task”. It is a composite which varies markedly, depending on an individual’s age and level of performance. It incorporates aspects of endurance and stamina (aerobic fitness); speed and power (for the continued use of which anaerobic fitness applies); muscle strength; elements of body composition such as body fat and muscle mass; joint mobility; and body balance. Dance calls on all these fitness component to a very high degree.(Brinson, Dick, 1996)

Figure 1-1: The components of physical fitness(One Opinion)



The Other Opinion

Physical fitness, these characteristics can be generalized as “the holistic concept”. By "the holistic concept" is meant a general idea of the unity and integrity within the human body. And in TCM the human body is regarded as an organic whole in which its constituent parts are inseparable in structure, interrelated and interdependent in physiology, and mutually influential in pathology. (Chunpeng Yao, 2010). Dance calls on one important words “Control” , to have control of your body . It incorporates aspects of internal control and outer control.

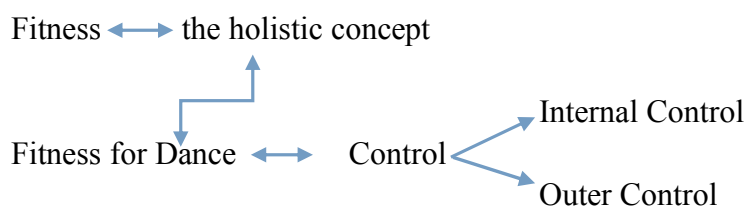


Figure 1-2: Fitness for Dance (The Other Opinion)

Chapter 3 Main Content And Purpose

With the many problems, I have a strong interest in increasing the awareness and importance of screening procedures as a means of preventing dance injuries. I will contact with informations of the traditional Chinese medicine and traditional Chinese dances to help identify potential problems and prevent future injuries, and the goal is to rapidly return dancers to their prior level of activity with no permanent limitation. I hope to find a easier、cheaper、more practical way to the prevention and healing of dance injuries.

Part 2 Methods

What shall I do and how to do?

I will introduce some concepts in traditional Chinese medicine, like Yinyang, Massage-Tuina and Qigong. Some concept like ShenYun in traditional Chinese dances will also be introduced.

In this paper, the knowledge of traditional Chinese medicine (TCM) and traditional Chinese dances are discussed in order to identify potential dangers in dance and to prevent the possible injuries. Even if injury happened, by means of Chinese medicine, the dancer could rapidly return their prior level without permanent action limitation.

Chapter1 Traditional Chinese medicine (TCM)

1. Traditional Chinese medicine (TCM)----Prevention

1.1. Prevention

TCM has always attached great importance to prevention. As early as in Huangdi's Classic on Medicine, the preventive thought of "preventive treatment of diseases" was advanced. This theory involves two aspects: preventive treatment before the occurrence of diseases and preventing deterioration after the occurrence of diseases. Basic Questions states: "Wise men always give the preventive treatment before a disease occurs and prevent a disturbance before it starts.... Not taking medicine until a disease comes on or not preventing a disturbance until it starts is no different from not digging a well until one is thirsty or not making weapons until a battle starts. Isn't that be too late?"

➤ Preventive Treatment of Disease:

It refers to taking various measures to prevent diseases from occurring. The occurrence of a disease is related to both pathogenic factors and vital qi. The former is the important condition for the occurrence of a disease, which the deficiency of the latter is the intrinsic factor for the occurrence of a disease. Therefore, preventive treatment of a disease must start with both strengthening the resistance inside the body and preventing pathogens from invading the human body. Basic Questions States: "The body with vital qi is never attacked by pathogenic factors." (Chunpeng Yao, 2010)

➤ Preventing the deterioration of disease:

Though prevention prior to the occurrence of a disease is the best policy, timely diagnosis and effective treatment to control the deterioration of disease is also important. Therefore, once a disease occurs, it should be early treated so as to cure it in its initial stage. Ye Tianshi, a famous practitioner of the Qing Dynasty, advised: "Be sure to treat the parts which the pathogens have not involved yet." This is also an important method of preventing the disease from further deteriorating.

1.1.1. The Four Diagnostic Methods

The four diagnostic methods, namely inspection, auscultation and olfaction, inquiry, and pulse-taking and palpation, refer to the four basic procedures used in diagnosing a disease. When a disease occurs, there must be its abnormal outward manifestations from which the pathological changes may be inferred, as is stated in Danxi's Experience on Medicine (Danxi Xin Fa), "To want knowing the internal conditions of the body, the external manifestations of the body should be observed ; to diagnose the external parts of the body may also know the internal conditions. That is because the internal conditions of the body are always reflected on the exterior of the body". (Zhu Zhengheng, 1481)

➤ Inspection

Inspection is the first diagnostic procedure by which the physician may observe the patient's vitality, complexion, physical build, head, neck, five sense organs, skin, tongue, external genitalia and anus on purpose so as to understand the condition of a disease. TCM holds that the human body is an organic whole. The exterior of the

body is closely related to the internal organs. Take observation the vitality and complexion for examples, the vitality refers to the general external manifestations of life activity of the human body, including spirit, consciousness and thinking. And it is the outward sign of the conditions of qi and blood, yin and yang, or the zang-fu organs. The vitality is manifested in manifold aspects, such as eyesight, complexion, facial expressions, physical build, behavior and so on, among which the expression of the eyes is the most important. This is because "all the vital essence from the five zang and six fu organs converges into the eyes." (Chunpeng Yao, 2010)

From the observation of vitality the physician may infer the abundance or inadequacy of the vital essence, analyze mildness or the severeness of the disease and predict the prognosis of disease. It is quite evident that the observation of vitality is of an important significance in diagnosing a disease. The manifestations of vitality are as follows; being of vitality, pseudo-vitality, and loss of vitality.

The observation of complexion is a diagnostic method for inspecting the colour and lustre of the face. TCM divides the facial colours into blue, yellow, red, pale and black, also known as the "five colours", whose changes may indicates the nature and the location of a disease. Generally speaking, red complexion indicates heat syndromes; white complexion indicates cold and deficiency syndrome; yellow complexion deficiency and dampness syndromes; blue complexion suggests pain and cold syndrome, blood stasis and convulsion; and black complexion hints deficiency of the kidney, blood stasis and fluid retention. Inspection also includes observation of the physical build. By the observation of sturdiness, weakness, obesity or emaciation as well as the posture of the movement and stillness, different kinds of diseases may be found out. And, in particular, the observation of the tongue is a unique procedure in TCM diagnosis. It is used to observe the changes of the tongue proper and the tongue coating so as to determine the abundance or decline of vital qi, tell the location of a disease, distinguish the nature of pathogenic factors and infer the degree of seriousness of a disease.

➤ Auscultation and Olfaction

Another diagnostic method is auscultation and olfaction. Auscultation means listening to the patient's voice, speaking, respiration, coughing and moaning. By auscultation, the teacher can not only learn about the changes of the phonatory organ, but also infer the pathological changes of the internal organs.

➤ Inquiry

This is a diagnostic method in which the patient or his companion are inquired to collect the information concerning a disease. The content of inquiry includes the chief complaints, present case history past history, life history, family history, as well as age, sex, native place, occupation, address and so forth inquiry, though covering a wide range of topics, should be conducted step by step in a planned way, with questions focused on the chief complaint and the history of present disease. Therefore, when asking a patient. the physician should focus his attention on the chief complaint to understand both the main reasons for the disease and clearest, the most suffered symptoms of the patient. For example: Asking about Chills and Fever; Asking about Perspiration; Asking about Diet and Appetite; Asking about Defecation and Urination;

Questioning about Pain; Questioning about Sleep and etc. Besides, chest and abdomen, ears and eyes, women's diseases, pediatric diseases may be asked.

➤ Pulse-taking and Palpation

It is the fourth diagnostic method, including pulse-taking and, on the other, palpation of different parts of the body. The former is a diagnostic procedure by which the physician may feel the patient's radial arteries with the finger-tips to judge pulse condition, thus learning and inferring the condition of illness. The latter is also a procedure by which the physician may touch, feel, push and press certain parts of the body to detect local abnormal changes, thereby determining the location and nature of the disease.

The location for feeling the pulse at present time is the patient's "cunkou", also named "qikou", or "maikou". Cunkou refers to obvious pulsative place of the radial artery on both sides of the wrist, and is divided into three regions: cun, guan and chi (inch, bar and cubit), which, on the left hand, reflect respectively the conditions of the heart, liver and kidney and, on the right hand, the conditions of the lung, the spleen, the stomach and the kidney. TCM holds that each of the six regions for pulse-feeling corresponds to one of the internal organs and reveals the pathologic changes of the relevant organ. For this reason, cunkou pulse-taking is commonly accepted by practitioners through the ages and still used today. The pulse is differentiated in terms of depth (superficial or deep), speed (rapid or slow), strength (forceful or weak), shape (thick or thready, soft or hard) and rhythm. Different pulse condition indicate different syndromes. For example, superficial pulse (fu mai), which is easily felt with gentle touch, indicates exterior syndromes and is present at the early stage of exogenous diseases; while deep pulse (chen mai), which is felt only by heavy pressure, indicates interior syndromes, and so on.

Palpation may be conducted in three procedures: touching, stroking and pressing. Touching is used to feel a certain part of the body, like the forehead or limbs with the fingers of palms, thereby detecting the body temperature, dampness or dryness; stroking refers to examining the patient's some parts of the body with the hands, e.g., a swelling, to learn the shape, size and sensation of the swelling; pressing means pushing and pressing over some parts of the body with the hands, e.g., the chest or abdomen, to make sure if they are tenderness, or have any cakings when pressed.

They are the presuppositions of correct differentiation in TCM, and inspection, auscultation and olfaction, inquiry and pulse-taking and palpation will help will help dancers to stay away from dance injuries.

1.2. Principles of Treatment

To study TCM treatment, attention should be paid to the therapeutic principles which must be followed in the treatment of disease.

- Treatment Aiming at the Root Cause of a Disease: Basic Questions points out, "In treating search for the its root cause of a disease of a disease in treatment." (Chunpeng Yao, 2010) It is not until the fundamental cause of a disease is found

out that it is possible to get to the essence of the problem and to make a proper treatment.

- **Strengthening Vital Qi and Eliminating Pathogens:** Strengthening vital qi is to increase body resistance. Eliminating pathogens means getting rid of pathogenic factors to facilitate and recover the strength of vial qi.
- **Readjusting Yin and Yang:** The imbalance of yin and yang is the basic pathogenesis of many a disease, therefore, regulating relative excess or insufficiency of yin and yang, remedying defects to rectify abuses and restoring relative balance of yin and yang are one of the basic principles in clinical treatment.
- **Treatment in Accordance with Three Factors (climate, locality and individual):** This is the therapeutic principle that TCM adopts in treating diseases. The occurrence, development and changes of a disease are involved by various factors, including the climate, geographical environment, the patient's constitution, sex and age etc. Therefore, when treating a disease, the doctor must take the three conditions into account, and make a concrete analysis of concrete conditions and deal with them in different ways, thereby working out an appropriate therapeutic method.

2. Yin and Yang

2.1. The Law of Nature

Yin and yang, which come from ancient Chinese philosophy, are a general term for two opposites of interrelated things or phenomena in the natural world. At first, their connotations were quite simple, referring to the two opposite sides of an object. The side facing the sun is yang and the reverse side is yin in the course of long practice and observation, the ancient Chinese people came to understand that the opposition and wax-wane of yin and yang are inherent in all things. Yi Zhuan says, "Yin and yang are what is called Dao", (Dao means the basic law of the unity of opposites in the universe). In other words, "Everything in the universe contains yin and yang." And they further believed that yin and yang can not only represent two opposite objects but also be used to analyze two opposite aspects existing in a single entity. Generally speaking, things or phenomena which are dynamic, bright, hot, functional, etc..., pertain to the category of yang, while those that are static, dark, cold, substantial, etc. , pertain to that of yin. The yin-yang theory holds that the development and changes of everything in the universe result from the unity of opposites between yin and yang. Su Wen says: "yin and yang are the law of heaven and earth, the principles of all things, the parents of all changes, the origin of life and death... " The yin-yang theory is an important constituent of the theoretical system of TCM and runs through every aspect of the system. It is used to explain physiology and pathology of the body

and to guide clinical diagnosis and treatment. The basic content of yin-yang theory can be summarized as follows. (Chunpeng Yao, 2010)

2.1.1. The Unity of Opposition Between Yin and Yang

By the opposition between yin and yang is meant that all things or phenomena in nature have two opposite aspects-yin and yang, such as heaven and earth, motion and quiescence, ascending and descending, exiting and entering, day and night, heat and coldness and so on. The former being yang and the latter yin (Chunpeng Yao, 2010) in every pair above. The unity is the outcome of mutual opposition and restriction between yin and yang. Without opposition, there would be no unity; Without mutual opposition, there would be no mutual complement. It is only through this kind of opposition and restriction that the dynamic equilibrium can be established. For instance, in the nature world, the motions of celestial bodies, the variations of the four seasons, the alternations of days and nights, as well as sprouting in spring, growing in summer, reaping in autumn and storing in winter, are all the concrete manifestations of the unity of opposites between yin and yang.

TCM believes that the normal physiological functions of the human body result from the opposite and unified relationship between yin and yang. Both of them are always in a state of dynamic balance. Even under normal physiological conditions of the human body, yin and yang can not be in a state of absolute balance, but in a state of relative balance. If, for any reason, the relative balance is destroyed, there is bound to be excess or deficiency of yin or yang, and then a disease will arise. As is stated in Su Wen , "Yin in excess causing yang disease, while yang in excess leading to yin disease." It is precisely due to the unity of opposites between yin and yang that all things can develop and change ceaselessly and the natural world is perpetually full of life.

2.1.2. Interdependence between yin and yang

Yin and yang are opposed to and yet, at the same time, depend on each other. Neither can exist in isolation without its Opponent's existence. In other words, without yin there would be no yang, and it's the same the other way round. So either yin or yang is the prerequisite for the other's existence. And this kind of coexistent relationship is stated in TCM, "solitary yin or yang failing to live." This interdependence is also reflected in the relationship between substances and functions. The substance corresponds to yin and the function, to yang. The function is the result of material motion, and nothing in the world is not in a state of motion. Thereby, there is not any substance which can't produce its function and there is also not any function which doesn't originate from the motion of its substance. Therefore, Neijing (Faxiang Zhou, 2012) says: "Yin in the interior is the basis for yang; while yang in the exterior is the activity for yin." "Yin" refers to the material, basis of functional activity of yang and "yang" refers to functional activity. The substance and function are interdependent and inseparable. Here is just an imaginable and vivid figure of speech. However, when the interdependent relationships between substances, between

functions as well as between substances and functions are abnormal, life activities will be broken, thus bringing about dissociation of yin and yang, depletion of essence-qi, and even an end of one's life.

2.1.3. Waning and waxing of yin and yang

Yin and yang always coexist in a dynamic equilibrium in which one waxes while the other wanes. In other words, waning of yin will lead to (causing, inducing, leading to, bring on, give rise to, produce, make, generating) waxing of yang and vice versa. Take the seasonal and climatic variations for example, it gets warm from winter to spring, and hot from spring to summer. This is the process of "yang waxing and yin waning," Conversely, it gets cool from summer to autumn, and cold from autumn to winter-the process known as "yin waxing and yang waning". Under normal conditions, the waning-waxing relation of yin and yang is in a state of relative balance. If this relation goes beyond normal limits, the relative balance of yin and yang will not be maintained, thus resulting in either excess or deficiency of yin or yang and the occurrence of disease, so far as to endanger one's life.

2.1.4. Transformation of yin and yang

In given conditions, either yin or yang may transform into its opposite, i. e. yin may be transformed into yang and yang into yin. If the waning-waxing of yin and yang is said to be a process of quantitative change, then that of their inter-transformation pertains to a qualitative change based on the quantitative change. Such a process is mostly a gradual one from quantitative to qualitative change. Su Wen (Chunpeng Yao, 2010) states: "Extreme yin gives rise to yang, while extreme yang gives rise to yin." "Extreme cold brings on heat, while extreme heat brings on cold". This is termed "Things will develop in the opposite direction when they become extreme." Pathologically, the yin syndromes can be transformed into yang syndromes, and vice versa. It must be pointed out that the decisive factor of the mutual transformation is the conditions, including internal and external conditions, without which such transformation will be by no means likely to occur.

The above statement is the basic content of yin-yang theory, which is also illustrated by "Taijitu" (Yin-Yang Diagram) below. In the diagram the white part indicates yang, and the black part yin. The relationships between the two are both opposite and complementary to each other. The white spot within yin shows the yang within yin, while the black spot does yin within yang. Meanwhile, they contain the potential for Inter-transformation and inter-wane-wax between yin and yang.

From the above, we can see that the content of yin-yang theory is composed of four aspects, among which the opposition and waxing-waning contain the opposite of contradiction; the interdependence and transformation contain the unity of contradiction; waxing-waning and transformation contain quantitative change and qualitative change. The former is the precondition for the latter, the latter is the outcome of the former.

2.2. The Application of the Yin -Yang Theory

2.2.1. Explaining the Tissues and Structure of the Human Body

The human body is an integrated whole. All its tissues and structures are organically connected and may be classified as two opposite aspects-yin and yang. That is why Su wen (Chunpeng Yao, 2010) states, "Man, having a form, can not deviate from yin and yang." In terms of the anatomical locations, the upper part of the body is yang and the lower part is yin; the exterior is yang and the interior, yin; the back is yang and the abdomen, yin; the lateral aspects of the extremities are yang and the medial aspects, yin. Concerning the zang-fu organs, the zang-organs store but not discharge essence-qi and, therefore, they are yin; while the fu-organs transmit and transform food into essence-qi but not store it, and, for this reason, they are yang.

2.2.2. Explaining the Physiological Functions of the Human Body

The yin-yang theory believes that the normal life activities of the human body result from the harmonious relation of the unity of opposites between yin and yang. Take the relationship between function and matter for example, function pertains to yang while matter, to yin. Physiological activities of the body are based on matter. Without matter, there would be no sustentation for function activities. And functional activities are the motive power for producing matter. In other words, without functional activities, the metabolism of matter would not be performed. In this way, yin and yang within the human body depend on each other for existence. If yin and yang can't complement each other and become separated from each other, life will come to an end. So Su Wen (Chunpeng Yao, 2010) says: "The equilibrium of yin and yang makes the vitality well-conserved; the divorce of yin and yang essence-qi exhausted."

2.2.3. Explaining the Pathological Changes

TCM considers that the imbalance between yin and yang is one of the basic pathogenesis of a disease. The occurrence and development of a disease are related to both the vital-qi and pathogenic factors.

2.2.4. Serving as the Guide to Diagnosis and Treatment

As the imbalance between yin and yang is the root cause for the occurrence and development of a disease, all clinical manifestations, no matter how complicated and changeable they are, can be explained with the aid of yin-yang theory.

3. Massage(TCM)-----Tui Na:

3.1. Massage: Overview

Massage both before and after exercise can be beneficial (Brody,1985). He points out that it also reduces muscle tension, relieves tissue edema, and helps prevent soreness following exercise. In jury its capacity to reduce inflammation and pain and relieve muscle spasms can speed recovery. It is a vital component in the prevention and treatment of the injury for dancers (Priscilla M Clarkson. Margaret Skrinar1988). According to Daniel D. Arnheim of Dance Injuries(1991), also advised: " One of the most important factors in dance is preparation of the body to withstand the rigors of physical stress. And "Maintaining a certain level of flexibility prior to dancing is

important for improving muscle function and preventing injuries"(Steinberg N, January 1st 2011).

Chinese Medical Massage (Tui Na), is good if you are experiencing pain in one or more parts of your body, such as neck pain, lower back pain, shoulder pain, slipped discs, sciatic nerve pain, stomach problems (such as indigestion, heartburn, or digestive problems), or intestinal problems. The masseur can give you an all-over massage and focus on specific areas with pain or do a treatment on the affected area. The masseur uses shiatsu, or acupuncture, to relieve pain. The masseur may use his thumbs, palms, elbow, and forearm while performing the massage.

3.2. A brief history of Chinese Medical Massage (Tui Na)

Chinese Medical Massage (Tui Na) is a hands-on-body treatment or devices-on-body treatment, is used for the prevention and treatment of injuries of medicine, whose purpose is to bring the body into balance, and including healthy massage, therapeutic massage and sports massage. Tui Na uses the Traditional Chinese Medical theory of channels and collaterals and the flow of the Qi energy as its basic therapeutic orientation. Through the application of massage and manipulation techniques, Tui Na seeks to establish a more harmonious Qi energy through the system of channels and collaterals, allowing the body to naturally heal itself. (GuangLan Wang, 2005)

Medical Chinese Massage Tui Na is the oldest known system of massage. Originating in China, it is recorded in the Yellow Emperor's Classic of Internal Medicine since 2300 B.C. as one of the five major therapies of the time. Massage techniques are ubiquitous in almost all early human cultures. Similar techniques date at least as early as the Shang Dynasty, around 1700 BC. Ancient inscriptions on oracle bones show that massage was used to treat infants and adult digestive conditions. In his book *Jin Gui Yao Lue*, Zhang Zhongjing, a famous physician in the Han Dynasty (206 BC), wrote, "As soon as the heavy sensation of the limbs is felt, "Daoyin", "Tui na", "Zhenjiu" and "Gaomo"(Zhijie Lu, 2003), all of which are therapeutic methods, are carried out in order to prevent... the disease from gaining a start." Around 700 CE, Tui na had developed into a separate study in the Imperial Medical College. Tui Na has remained an organized and systematically developed system of massage since that time. Currently in China Tui Na is taught as a separate, but equal field of study in the major traditional Chinese medical colleges.

3.3. Physiological Roles of Massage

In ancient China, medical therapy was often classified into "external" and "internal" treatments. Tui na was one of the external methods, especially suitable for use on the elderly population and on infants. Today it is subdivided into specialized treatment for infants, adults, orthopedics, traumatology, cosmetology, rehabilitation, sports medicine, etc. Tui na has been used extensively in China for over 2,000 years.

Tui na has fewer side effects than modern drug-based and chemical-based

treatments. It has been used to treat or complement the treatment of many conditions; Nervous System, Circulatory System, Motion Systems (musculoskeletal disorders), Digestive System (chronic stress-related disorders of the digestive), and Respiratory Systems etc.

3.4. Technique

The words Tui Na translate into "push-grasp" or "poke-pinch" in Chinese. Physically, it is a series of pressing, tapping, and kneading with palms, fingertips, knuckles or implements that help the body to remove blockages along the meridians of the body and stimulates the flow of qi and blood to promote healing, similar to principles of acupuncture, moxibustion, and acupressure. Tui na's massage-like techniques range from light stroking to deep-tissue work which would be considered too vigorous or too painful for a recreational or relaxing massage. Tui Na methods include the use of hand and arm techniques to massage the soft tissue of the body, stimulation of acupressure points to directly affect the flow of Qi energy through the system of channels and collaterals, and manipulation techniques to realign the musculo-skeletal and ligamentous relationships (bone setting). External herbal poultices, compresses, liniments and salves are also used to enhance the other therapeutic methods.

Clinical practitioners often use liniment, plasters, herbal compresses and packs to aid in the healing process, which should be used with caution on sensitive skin. Tui na is not used for conditions involving compound fractures, external wounds, open sores or lesions, phlebitis, or with infectious conditions such as hepatitis. Tui na should not be performed on the abdominal portion of a woman in menstrual or pregnant periods, and it is not used for treatment of malignant tumors or tuberculosis.

3.4.1. Introduction of Massage(TCM)----Tui Na Manipulation

Massage manipulations refer to the manipulating skills with Standardized movement structure for treatment don by massage-therapist with their hands, limbs or other parts of the body at the specific location of the patients.

Manipulation is the important means of Massage(TCM)----Tui Na treatment. Its quality and standard can directly affect the therapeutic result of Tui Na. So it is an important link to use proper manipulations on special acupoints or parts in order to improve the curative effect.

Generally speaking, Tui Na manipulation requires to be permanent, forceful, even and gentleness so as to be deep and penetrative. The so called "permanence" is that manipulation should last for a certain period of time according to the requirement. "Forceful," is that manipulation must have a certain force which should be changed according to patient's body constitution, pathological condition, therapeutic part etc. So-called "even" is that manipulation should be rhythmically with the same frequency and pressure all the time. "Gentleness" means that manipulation should be light but not superficial, heavy but not retained, not rough and hard, and the change of the movements should be natural and smooth. All requirements above are inter-connect

closely. So an operator should practice the manipulation for long period in order to operate each manipulation skillfully and reach an ideal step as stated in the book of 《Golden Mirror of Medicine》 (“YIZHONG JIN YAN” Notes on the Shang Han Lun, by Wu Qian (1742, Qing Dynasty) : “Once in clinic, touching outside will give skillful force inside; changing the manipulation with mind concentrated and realizing the rules from the concentrated mind.”(Peifeng Chen, 2004)

There are many kinds of Tui Na manipulations. We divided the common used manipulation into six categories. According to their movement form, they are swing, rubbing, vibrating, pressing, tapping and Moving the joints, and each category has some different manipulations.

3.4.2. Common-used Manipulation

The followings are some most common-used manipulations: 15 Types

➤ Pushing Manipulation with One-finger Meditations

Pushing with one-finger meditation refers to the manipulation by using the tip of the thumb, or radial side of the thumb or palmar surface of the thumb to push the region to be treated with the shoulder relaxing, the elbow dropping, wrist hanging, elbow flexing and stretching cyclically to power the forearm and wrist joint to swing inward and outward, with the combination of thumb’s flexion and extension.

Essentials: relax muscles of the upper limbs, hang the wrist joint naturally, drop the elbow slightly and make it lower than the wrist, swing the wrist outward and backward, move the thumb slowly, the normal frequency is 120 to 160 times per minute. This manipulation’s stimulating intensity is medium and the area of manipulation is small. It can be used on all the acupoint of the body.

➤ Rolling Manipulation

With the minor thenar eminence and dorsoulnar side used as force-applying surface, the practitioner lowers his shoulder and drops his elbow with arm erected and palm set upright, proceeds cyclical flexion and extension, inward and outward arm-rotating, swinging with the elbow joint and forearm accompanied with extension and flexion of the wrist joint to roll the hand on the region to be treated. Such manipulation is called rolling manipulation.

Essentials: relax the shoulder, arm and wrist, bend the elbow joint about 120 degree, apply power with minor thenar eminence and dorsoulnar. Roll the hand to and fro, make the wrist joint flexion, extension and outward rotating. Press the thenar eminence against body surface tightly, no scrubbing to and fro. Make the pressur of the manipulation even. Operate the manipulation rhythmically, never be quick one moment and slow the next, or light one moment and heavy the next. The normal frequency is 120 to 160 times per minute. It has strong stimulation on large area and can be operated on shoulder, back, limbs and limbs with thick muscles.

➤ Kneading Manipulation

This is a manipulation performed by kneading slowly and gently the therapeutic region to-and-for with fingers, the root of the palm, major thenar eminence. According to the different parts to operated, it can be divided into fingers kneading

and palm kneading manipulations etc.

Essentials: relax the wrist joint, move the forearm with the wrist to-and-fro jointly. The moving range of the wrist may enlarge gradually. Pressure should be soft with the frequency of 120 to 160 times per minute. This manipulation is light and soft with small stimulating intensity, so it can be applied on all the area of body.

➤ **Pushing Manipulation**

With the finger(s) or palm or elbow joint, the practitioner push them on a certain area of body in one direction. It is called pushing manipulation.

Essentials: Use the force steadily and slowly. The power-applying part should be put on the patient's skin closely. All the regions of the body can be manipulated with the method.

➤ **Rubbing Manipulation**

The manipulation performed by rhythmically rubbing the therapeutic part in a circular motion with the palm or the palmar side of the operator's fingers close to the therapeutic region is called rubbing manipulation.

Essentials: Bent the elbow slightly, relax the wrist with the fingers stretched naturally. Use force with the coordinative motion of forearm in circular way. The frequency is 120 to 160 times per minute. The intensity of this manipulation is soft and can be applied on chestal, abdominal, and hypochondric regions.

➤ **Scrubbing Manipulation**

The manipulation of scrubbing the therapeutic part to and fro along a straight line with the operator's palmar face, minor or major thenar eminence is called scrubbing manipulation.

Essentials: Make the power-applying portion touch the skin closely. Stiff pressure should be avoided so as not to damage the skin. The moving route is a straight line. The movement should be even, steady and continuous. The normal frequency is 100 to 120 times per minute. This manipulation has soft and warm stimulating effect so it can be used on the chest and abdomen, lumbar and back, and limbs.

➤ **Rubbing-Rolling Manipulation**

Two Palms facing each other rapidly roll-knead the held part of the body with relative force and move upwards and downwards repeatedly. This manipulation is called rubbing-rolling.

Essentials: Use force symmetrically and rub-roll rapidly but move slowly. This manipulation can be used on lumbar and back, hypochondrium and limbs as an ending manipulation.

➤ **Wiping Manipulation**

This manipulation is performed by softly rubbing the skin of the affected part with the surface of one thumb or surface of two thumbs up and down, or right and left straight.

Essentials: The force should be moderate, heavy but not stagnant, light but not superficial. It can be used on head, face and cervical area.

➤ **Shaking Manipulation**

A manipulation by which the operator holds the distal end of the patient's affected upper or lower limbs and makes a constant, narrow range, up and down shaking.

Essentials: The range of shanking should be narrow but the frequency should be rapid.

It is mainly applied to limbs, especially upper limbs extremities and mostly after rubbing-rolling fouflage manipulation as an ending manipulation.

➤ **Pressing Manipulation**

Pressing is manipulation performed by pressing the therapeutic region continuously with the operator's fingers-tip, palm-root, or the tip of his elbow, from lightly to heavily shallowly to deeply.

Essentials: Pressing manipulation can be divided into thumb-pressing, palm-root-pressing, knuckle-pressing and elbow-pressing. It has strong stimulation intensity and mostly used with kneading manipulation. This manipulation can be applied to all parts of the body.

➤ **Grasping Manipulation**

Grasping manipulation is performed by symmetrically and slowly lifting and squeezing the therapeutic part and meanwhile holding and twisting, foughing, kneading, and pinching it with the operator's thumb, index finger and middle finger or with five fingers.

Essentials: The manipulation should be operated softly and continuously, the force should be form light to heavy. Sudden stimulation should be avoided. It has strong stimulating intensity and can be used on neck, shoulder and extremities combined with some other manipulations.

➤ **Holding-twisting Manipulation**

Holding the operated parts with the thumb and the index finger and rolling-kneading to and fro with relative force is called holding-twisting'

Essentials: This manipulation should be operated flexibly and quickly without stagnation. It is mainly used on small joints of extremities.

➤ **Patting Manipulation**

The manipulation of patting-beating with a hollow palm on the body surface is called patting manipulation.

Essentials: The fingers are close-up naturally. The metacarpophalangeal is mainly used on shoulder and back, lumbar and lower limbs.

➤ **Rotating Manipulation**

Hold the proximal and distal ends of the joints with both hands respectively and move the joint with to and fro from softly. This is called rotating manipulation.

Essentials: In the course of operation, the movement of the hands should be smooth and moderate, not beyond the physiological limit of the joints. This manipulation can be used on the joints of cervix and four limbs.

➤ **Twisting Manipulation**

A manipulation performed with both hands pulling the two articular ends of the limbs with force in opposite directions is called twisting manipulation.

① Twisting manipulation of the Cervical Vertebrae

The patient sits up straight, the operator holds patient's cervical joints and twist the neck with range enlarged gradually, then twist the cervical joints tightly with the two hands in opposite directions.

② Twisting of the lumbar Vertebrae

The patient is in lateral-lying position. The operator props the anterior shoulder of the

patient with one hand and hip with another hand and elbow, then rotates the lumbar vertebrae to a maximum degree and operates a rapid pushing-dashing in opposite direction. A cracked sound may be heard.

Essentials: In operating, the manipulation should be ready and moderate. The pulling can only be done in thoroughly relaxation of the lumbar vertebrae. The movement of two hands should be coordinative. Rough force should be avoided.

3.4.3. Routine Operating Steps In 5 Parts Of The Body

The followings are the routine operating steps in 5 parts of human body:

- Head and Face Region
- Nape and Back Region
- Chestal and Abdominal Region
- Shoulder and Upper extremity Region
- Lumbar and Lower extremity Region

3.5. Acting Principle of Massage

Massage is a Chinese medical therapy with various manipulations applied to certain parts of the human body (including specified passive movement of the limbs) to prevent diseases. Chinese massage, as one clinical branch of TCM, demands rich knowledge both in theory and practice. Professional massage doctors should have not only the knowledge of Western medicine, a good command of TCM diagnosis and treatment methods form upon an overall analysis of symptoms and signs, but also a good physical constitution and proficient manipulation techniques for clinical massage practice. One factor is the quality of the manipulation and the other factor is the exceptional effect of the manipulated locations, channels and collaterals, and points. Therefore, generally speaking, when the curative effect of massage is working upon one specified location of the body through manipulations, the direct effect of its stress can act locally to promote blood circulation and remove blood stasis, restore and treat injured soft tissues, correct deformity and abnormal location of bones and soft tissues in anatomic site. On the other hand, dynamic wave signals of the manipulation can reflexively influence the physiological function and pathological state of the body fluid, Qi and blood, ying, wei, cerebrospine, viscera, mind and emotion, etc. through the conducting channels points and collaterals viscera so as to effect a recuperative medical function over other part of the body or whole body. The main acting principles are as follows:

3.5.1. Regulating Yin and Yang

Massage treatment follows the principle described in Huangdi's Classic on Medicine (Chunpeng Yao, 2010) : “ examining carefully the condition of Yin and Yang so as to get them in relative balance”. That is to say, massagists should, according to differential diagnosis, use different manipulations with stimulations of different degrees which may be mild, powerful, slow, quick, vigorous or soft in order to treat the illness of deficiency type by tonifying methods, excess syndromes with the purgative and reductive manipulation, heat syndromes with methods of cold or cool

nature, cold syndromes with hot-nature methods, stasis by dissipation, stagnation and accumulation of pathogen by diffusion, exopathogens in the superficialities of the body by dispersion and half exterior and half interior syndromes by mediation so as to change the relative excessiveness of Yin and Yang, regulate their relationship and restore their relative balance, eliminate pathogen and recover the vital-qi.

3.5.2. Recovery of the Function of Tendons, Bones and Joints

In TCM, soft tissues and joints include fascia, muscle, muscle tendon, tendon sheath, ligament, joint capsule, synovium, fibrous ring of vertebral disc, articular cartilage disc and other soft tissues of the body. Direct trauma, indirect trauma and long-term strain can cause them a series of pathogenic changes. Their injuries can be local bruise, muscle sprain, fibrous rupture, tendon avulsion, lipped tendon, ligament rupture, laceration of joint capsule, semi-dislocation of bones, joint dislocation, chondroclasts and joint or soft tissue strain etc. Massage has quite a good curative effect on all the above mentioned illnesses, and its chief principles are as follows:

➤ **Relaxing Muscles and Tendons and Dredging the Channels and Collaterals.**

After trauma, signals of spasm and pain can be sent off by the attaching points of muscles, fasciae, tendon, joint capsules, etc to alert the concerned tissues through the reflexion of the nerve. Muscular contraction, tension and even spasm are the very reflexion of this alert status. This is a protective reaction of human body, aiming at reducing the activities of the limbs and avoiding the tracting stimulation to the injured part so as to relieve pain. But if no timely treatment is given or the treatment is not thorough-going, adhesion, fibrosis or cicatrization of the injured tissues will occur and even damaging impulsion will be produced to increase the pain, muscular contraction or tension, and subsequently secondary pain foci and malignant pain rings will appear in the surrounding tissues. Both the primary and secondary foci can stimulate and compress the terminals of nerves and the small nutrient blood vessels, resulting in partial obstruction in blood circulation and metabolism.

Massage is a very effective way to remove muscular tension and spasm, in which it can not only relax the muscles but also get rid of the cause that leads to the muscular tension. The mechanism of massage is consisted of three parts: firstly, it can locally promote blood circulation and raise body temperature; secondly, it can increase the threshold value of pain of tissues with appropriate stimulation; thirdly, it can extend the tense and spasmodic muscles so that the illness can be eliminated.

➤ **Restore and treat injured soft tissues and reduce dislocated joints**

Massage manipulations of tracting, traction and counter-traction, rotating and pulling or flicking-poking can reduce joint dislocation, joint semiluxation, relocate the sprained soft tissue to normal position, restore slipped tendon, re-situate herniation of pulpiform nucleus, take out the embedded synovium, eliminate the pathogenic state of muscle spasm and local pain, promoting the recovery and reconstruction of the injured soft tissues.

➤ **Tripe adhesion, dredge stenosis**

When the soft tissues are injured, adhesion of the muscle, tendon, ligament, joint capsule, and others, as well as local bleeding and organization hematoma may cause a

long-term pain and hinder the joint activities. Treatment, such as flicking-poking, joint lift-dragging, traction and counter-traction, rotating and pulling, can remove adhesion and facilitate the activity of joints.

In the body parts which have fiber-sheathed vessels of bones such as the tendon vessel of the long head of biceps, tendon vessels and tendon sheath of flexor hallucis longus and flexor digitorum at the processus styloideus of radius, there may, due to hyperosteogeny, chronic strain or attack of wind, cold and dampness, occur with tumefaction and hyperemia of the tendon and tendon sheath or exudation inside the sheath and then fibrosis, which will thicken the wall of the sheath, fetter the tendon inside the sheath and affect the extension-flexion movement of the joints. If it is not a serious case, the sheath will become constrictive, and snapping sounds will be heard while moving. If the case is a serious one, the local adhesion will become indurative, and the joints will lose its extension-flexion function. For tendons and sheaths with pathologic changes, local massage by plucking and continuous rhythmic finger-kneading or rolling in coordination with rolling-pulling, traction and counter-traction and other manipulations of passive movement of the joint can subdue swelling, stop pain, strip adhesion, enlarge constriction and relieve the snapping sound to restore the tendon to its normal sliding function in the sheath.

3.6. The Fourteen Channels and Their Commonly-used Point

Shisijing(fourteen channels) is general term for the twelve regular channels connecting the twelve internal organs, and the Ren Channel and the Du Channel of the eight Extra-channels. The theory of the fourteen channels and their commonly-used points is considered as the principal component of the meridian doctrine and the point doctrine and as the most practical and important theoretical rudiment in massage.

3.6.1. An Outline Of the Fourteen Channels

➤ The Twelve Channels

The Twelve Channels are generally regarded as the principal part of the channel system, so they are also called “twelve regular channels”. They respectively pertain to twelve internal organs, and are named after them. The physiological functions of the twelve channels mainly concern three respects: connecting all parts of the body, transporting qi and blood and regulating the function of the body.

The channels and collaterals communicate with the viscera and extremities closely, making the “five zang-organs、 six fu-organs, extremities, bones, skin muscles, tendons as well as the five sense organs an organic whole. Channel of “jing” in Chinese implies route, which is the main passage in the system of the channel and collateral; while collateral or “luo” in Chinese, means “net”, which is the branch of the channel in the system. The channels and collaterals spread all over the body and from a criss-cross network, in which qi and blood make their circulation and transport various nutrients to the tissues and organs in all parts to maintain the normal

physiological functions of the human body. Through the criss-cross connection and overall regulation by the channels and collaterals, all parts of the human body cooperate and coordinate with each other to resist invasion of the external pathogenic factors and maintain the normal function of the organism.

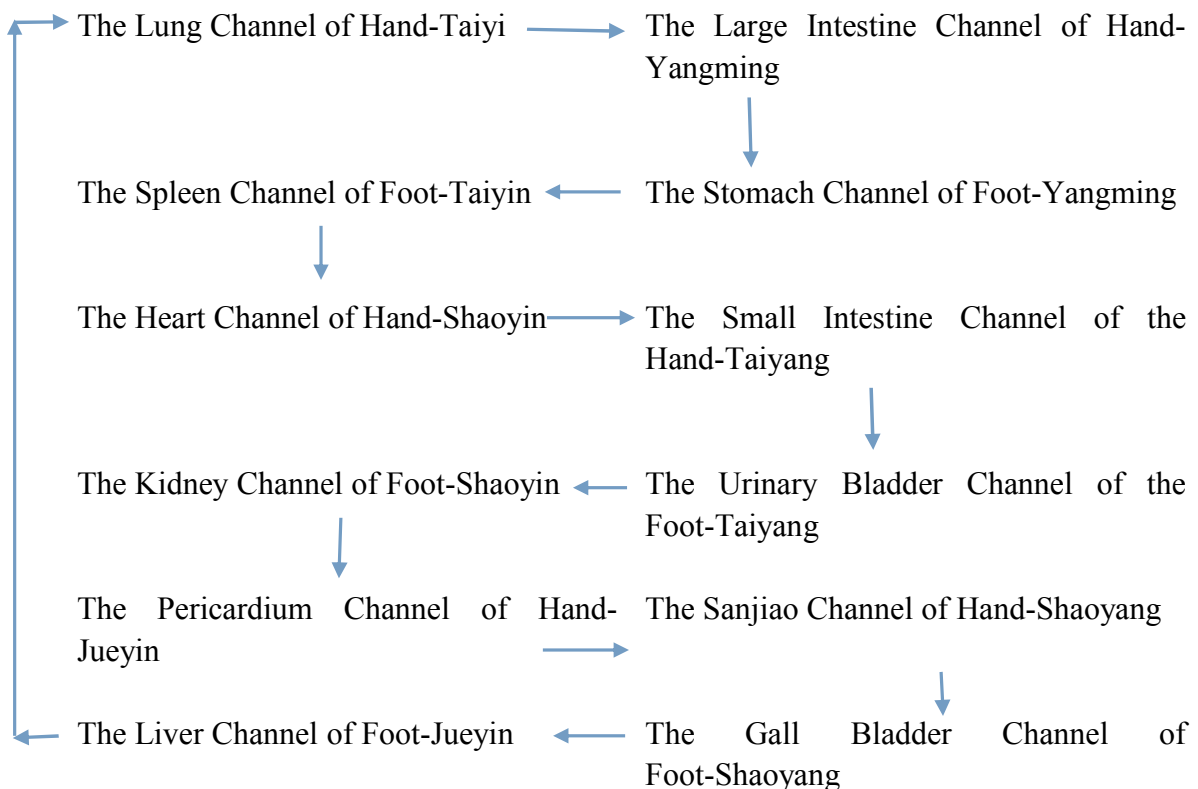
So it is said in *Miraculous Pivot* the “ ‘twelve meridians are vital to human beings’ health and key to diseases and its treatment. They are the beginning to learner and the peak to an expert”. (Chunpeng Yao, 2010)

Through the network of the meridians of hand and foot, the twelve meridians joint together and form an endless ring, in which qi and blood start circulating from the Lung Channel, go through the other meridian and finally enter the Liver meridian, and then to the Lung meridian again to restart another circulation. Qi and blood circulate round and round to nourish the whole body continuously. The names of the twelve meridians, their exterior-interior relations and their flowing order are shown in the following table.

Figure 1-3

Exterior-Interior Relation and Flowing Order of the Twelve Meridians

The meridian of the Zang-organs are Yin channel which belong to the interior. The meridians of the Fu-organs are Yang channel which belong to the exterior.



➤ The eight extra meridians

The eight extra meridians are composed of Du, Ren, Chong, Dai, Yinqiao, Yangqiao, Yinwei and Yangwei meridians. They are interlated with the twelve regular meridians and perform the functions of dominating, connecting and adjusting the twelve regular meridians. Their main physiological function is to regulate qi and blood inside the twelve regular channels according to whether qi and blood in the twelve channels are “insufficient” or “overflowing”.

3.6.2. An Outline of the Point

The term Shuxue(points) has several names in Chinese, such as xuwei, qixue, gukong, and kongxue. In Chinese shu means transfusion, transmission, conveyance and transportation, while xue means hole and pooling. The points are the locations where qi and blood of the channels and collaterals and of the viscera come in and go out and pool.

The points are classified are three kinds: “channels points”, referring to those that have specific names and locations and are ranged along the course of the fourteen channels; “extraordinary point” (extrachannel-points), referring to those which have not been included in the fourteen channels although they have definite locations and names; and “Ashi points’ or “Tianying points”, referring to those that have no specific names and fixed locations and are usually to be decided on the locations of tenderness and other reaction.

So, to stimulate the points by hand manipulation may facilitate the readjusting function of the corresponding channels and collaterals, which in turn regulate the function of qi and blood in the viscera and activate the resistance of the organism itself to prevent and treat diseases. The following methods are usually used in point location.

➤ Bone-length Measurement

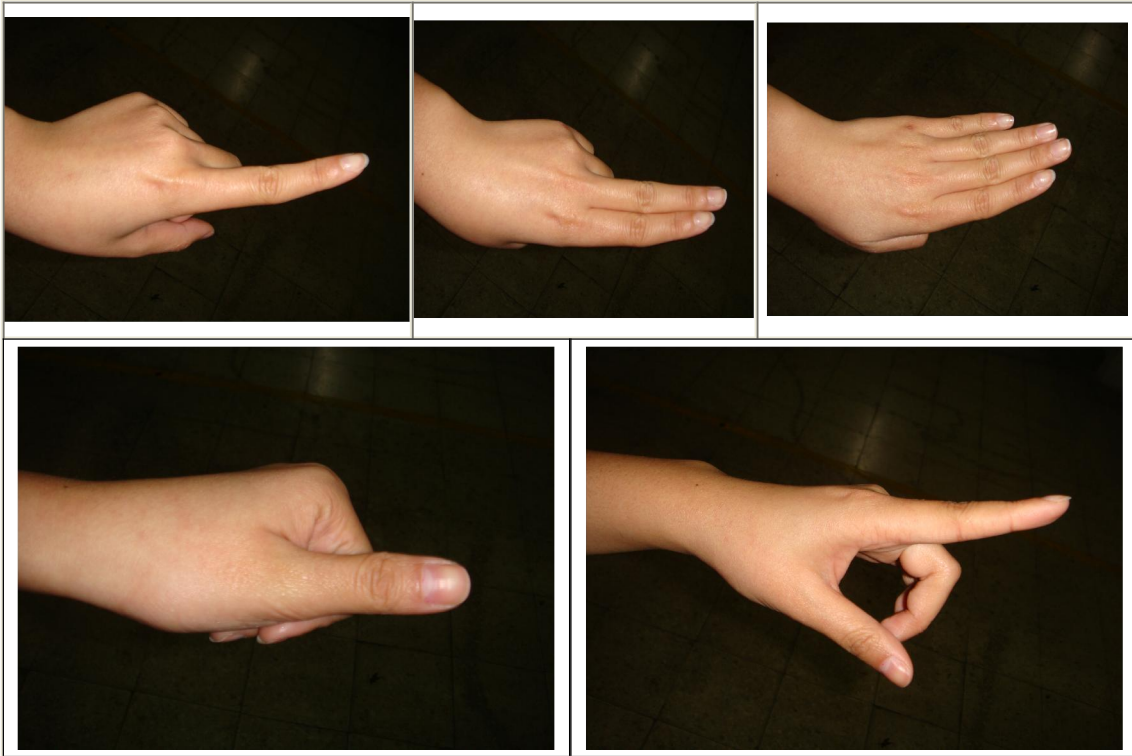
The various regions of the body are given certain length and width and are divided into several equal portions, each division being termed one cun and taken as the unit of measurement for locating points. The method is applicable to patients of any age group with any body build. Division of various regions is shown in the follow table.

Regions	Beginning and end	Method of measurement	Length in cun	Explanation	
Head	Anterior hairline to posterior hairline	Vertical	12	Or 18 cun from ophryon Dazhui(Du 14), minus 3 cun from ophryon to anterior hairline and 3 cun from Dazhui to posterior hairline	
Chest and abdomen	Between two nipples	Horizontal	8	For horizontal measurement of chest and abdomen	
	From xiphisternal synchondrosis to umbilicus	Vertical	8		
	From umbilicus to upper border of pubic symphysis	Vertical	5		
Back	From two medial borders of scapulae	Horizontal	6	For horizontal measurement of waist and back	
Upper limbs	From anterior axillary fold to transverse cubital crease	Vertical	9	Applicable to measurement of both medial and lateral aspects of upper limbs	
	From transverse cubital crease to transverse carpal crease	Vertical	12		
Lower limbs	From femoral trochanter to centre of patella	Vertical	19	For measurement of thigh	For measurement of anterior lateral and posterior aspects of lower limbs
	From centre of patella to tip of lateral malleolus	Vertical	16	For measurement of shank	
	From pubis to upper border of internal epicondyle of femur	Vertical	18	For measurement of thigh	For measurement of medial aspect of lower limbs
	From lower border of medial condyle of tibia to top of medial malleolus	Vertical	13	For measurement of shank	

Table 5: Bone-length Measurement

➤ Finger-length Measurement

This is a method with which the fingers of the patient are used for measurement to locate points. If the body build of the patient is similar to that of the doctor, the doctor may use his own fingers in measurement. Generally, the distance between the two ends of the interphalangeal joints of the middle finger, when it is flexed, is taken as one cun. The breadth of the four fingers (index, middle, ring, and little fingers) close to each other is taken as 3 cun.



Figures 1-4: Finger-length Measurement

➤ Measurement According to the Anatomical Landmark

To locate a point on the basis of the anatomical landmarks on the body surface is the most fundamental method of point location. The following two approaches are often applied clinically.

① Fixed Anatomical Landmark

It refers to marks which can not be changed by movement, such as the five sense organs, nipples, umbilicus as well as the prominences or depressions of various bone joints.

② Movable Landmark

It refers to marks that appear when a certain posture is assumed in movement, such as the depression or prominence of the muscles, the appearance of the muscle tendon and the creases of the skin.

3.7. Self - Massage

Teaching Methodology of Self-Massage of Traditional Chinese medicine states: Massage by using such simple manipulations as pushing, rubbing, pressing, kneading

and thumping with one's own hands on certain points or in certain special areas of the body surface for the purpose of health care, health preservation and autotherapy of illnesses, is called "self-massage". Self-massage for health care or preservation is called "self-health-care massage", that for autotherapy of illness is called "self-treatment massage" or "self-massage therapy".

As an important component of Chinese massage, self-massage acts as a remedy by means of stimulation through manipulation to activate the channel, qi and blood system of oneself. Meanwhile the manipulation process itself is actually an active exercise. So long as one can select proper channels, points and areas based on the conditions of the individual and carry out self-massage seriously, persistently, orderly and step by step, he is sure to achieve satisfactory results.

Self-massage can be done in a sitting, standing or lying position depending on the conditions of the individual. The practitioner should carry out manipulations calmly and attentively with a proper posture, get manipulation, strength, mental activities and qi flow well coordinated, viz. Mind concentration should follow the manipulating hand to the area being massaged and, coordinated by breathing, direct qi through concentration to the channels and points at the area being massaged. When manipulations such as pressing are conducted, one should exert strength step by step to, so much the better, get the feeling of qi manifested as soreness and distension at the channels and points. The hand and the skin of the treated area should be kept dry when rubbing or scrubbing manipulations are performed. Toilet powder or a kind of proper media may be applied if there is sweat. The strength exerted should be appropriate; the manipulation should give one a feeling of local warmth. Violent strength and prolonged rubbing scrubbing should be avoided lest the skin be injured. Self-massage is usually performed twice a day, in the morning and evening, 20-30 minutes each time.

At the initial stage of self-massage, general fatigue, especially aching-pain in the manipulating hand, may occur after massage. Those are the normal phenomena occurring only because of inadaptability of one's physical strength to it. The discomforts may disappear naturally so long as one perseveres in doing the self-massage, which is called "self-exercise" in the traditional Chinese doctrine of health preservation and protection, and becomes skillful in manipulation, powerful in strength and fruitful in attainments. On the contrary, one may feel warm all over, light-hearted and cheerful. Further more, one can, after some self exercises, select points at any part of the body for self-massage and will not abstain from selection of some effective points on hesitancy of "impossibility to reach the points", provided that the motor function of the joint of the upper extremities is basically normal. In addition, self-massage is often done in combination with qigong(breathing exercise) which has synergism with it. Introduced here are some common self-massage methods.

3.7.1 Self-health-care Massage

Local massage, also called "local exercising" in ancient times, is a kind of self-massage carried out on certain parts of the body.

3.7.1.1. Health Care of the Head, Face, Eye, Nose, and Ears

➤ Head-face Health Care

Manipulation:

① Pushing the Forehead on Either Side

Bend the two index fingers and push with their radial sides from the midline of the forehead which runs from Yin-Tang(Extra 1) to the anterior hairline separately toward the left and right Taiyang(Extra 2), Sizhukong(SJ 23) and Touwei(ST 8) on the two sides of the forehead, respectively for altogether 30-50 times. (Figure 1)

② Wiping the Temples

Press the temples with the whorled surfaces of the thumbs and wipe backwards repeatedly with force for about 30 times. The massage should give a sensation of soreness and distention. (Figure 2)

③ Pressing-Kneading the Back of the Head

Put the whorled surfaces or the tips of the thumbs tightly on the points of Fengchi(GB 20) and press them intervalley for over 10 times followed by rotative kneading. Then knead Naohoukong for about 30 times until the patient has a sensation of soreness and distention. (Figure 3)

④ Patting the Vertex

Sit upright with eyes looking straight ahead and teeth clenched. Pat rhythmically on the fontanel area with the palm for about 10 times. (Figure 4)

⑤ “Bathing the Face”

Rub the hands against each other to get them warm and, with the palms put lightly against the forehead, rub forcefully down to the mandibles, and along the mandible margins sidewise to the point of Jiache(ST6), then upwards via the preauricular area and the temples to the midpoint of the forehead, Repeat the procedure for 20-30 times until the face feels warm. (Figure 5)

Function:

The exercise has the functions of invigorating the brain, improving intelligence and tranquilizing the mind. It is effective in the treatment of headache, dizziness, insomnia, amnesia, neurosis and facial paralysis.

➤ Health Care of the Eye

Manipulation:

① Kneading Zanzhu(UB 2)

Apply the whorled surfaces of the thumbs on the two points of Zanzhu(UB 2) in the depressions proximal to the medial ends of the eyebrows and knead for 20 times respectively. The force of kneading should be increased gradually to get a feeling of soreness and distention.(Figure 6)

② Kneading Jingming(UB 1)

Put the thumb and the index finger of the right hand on the point Jingming(UB 1) which is located in the depression 0.1 cun above the inner canthus. Press down and pinch alternatively for about 20-30 times.(Figure 7)

③ Pressing kneading Sibai(ST 2)

Put the index fingers on the points of Sibai(ST 2) each of which is 1cun under the midpoint of the lower orbit, and press knead for about 20 times to get the sensation of soreness and distention.(Figure 8)

④ Scrapping the Orbits

Bend the index fingers, apply their radial sides against the internal aspects of upper orbits and scrape from the inner canthi to the outer, followed by scrapping the lower orbits in the same way, for about 20-30 times.(Figure 9)

⑤ “Ironing” the Eyes

Close the eyes slightly. Rub the hands against each other until they are hot and cover the eyes with the palm readiculus to “Iron” the eyes for about 30 seconds followed by rubbing them 10 times or more.(Figure 10)

⑥ Kneading Taiyang(Extra 2)

Press the points Taiyang(Extra 2) hard with the whorled surfaces of the thumbs and knead them for about 30 times to get the sensation of soreness and distention. (Figure 11)

Function:

These manipulations are effective for prevention and treatment of myopia, blurred vision, glaucoma, optic atrophy and other eye diseases.

➤ Health Care of the Nose

Manipulation:

① Pressing - Kneading Yingxiang (LI 20)

Rest the whorled surfaces of the index fingers on the points of Yingxiang (LI 20) and press and knead them for about 30times to get the sensation of soreness distention. (Figure 12)

② Rubbing the sides of the Nose

Rub the index or middle fingers of two hands against each other to get them hot and rub with them the nasolabial grooves up and down to get them hot too. Do it about 30 times each time. (Figure 13)

Function:

These manipulation are effective for prevention and treatment of cold, stuff and running nose, allergic rhinitis, chronic rhinitis, paranasal sinusitis, etc.

➤ Health care of the Ear

Manipulation:

① Pressing - kneading the Points Around the Ear

Press and knead, with the tips of the thumbs or the middle fingers, the points Ermen(SJ 21), Tinggong(SI 19), Tinghui(GB 2), Yifeng(SJ 17) and others for about 20 times each to get the sensation of soreness or distention. (Figure 14)

② Rubbing the Helix

Pinch the helices gently with the thumbs and the radial sides of the index fingers, and rub down and up repeatedly for about 30 times to get the helices hot. (Figure 15)

③ Ming Tiangu

Apply the two palms to the ears, with the bases of the palms pointing to the front and the fingers to the back, and use the index and middle fingers, with the former being on top of the latter, to flick-hit the protruded bones behind the ears 20 times to produce a blooming sound in the ears. (Figure 16)

④ Rubbing and Scrubbing the Part in Front of the Ear

Apply the radial parts of the two thumbs or the palm faces of the index fingers to

the areas in front of the ears and do repeated up and down rubbing and scrubbing about 30 times until a proper sensation of heat is achieved.

Function:

These manipulations are effective for prevention and treatment of tinnitus, dysacusis, deafness and otitis media.

3.7.1.2. Health Care of the Extremities

➤ Health Care of the Upper Limbs

Manipulation:

① Pressing - knead the Points of the Upper Limbs

With the whorled surface of the thumb or the middle finger, press and knead the points in order of Jianneishu, Jianyu(LI 15) and JianJing(GB 21) around the shoulder joints, Quchi(LI 11), Shousanli(LI 10), Chize (Lu 5), Quze(P 3), Shaohai(H 3), and Xiaohai(SI 8) around elbows and Waiguan(SJ 5), Neiguan(P 6), Yangchi(SJ 4), Yangxi(LI 5) and Hegu(LI 4) around the forearms and wrists. Press and knead these points 20 times each and try to get the “feeling of qi” manifested as soreness, distention and tingle. Massage the points of the left arm with the right hand and vice versa. (Figure 17)

② Pushing - Rubbing the Upper Limbs

Rub with the right palm the points on the left arm (vice versa) in the order of the anterior, posterior, medial and lateral aspects of the shoulder, the elbow and the wrist till they are warm (about 10-20 times for each aspect). Then rug the lateral side of the arm with the palm from the dorsal carpal cross striation up along the channel to the point Jianyu (LI 15) at the exterior aspect of the shoulder, then move the palm to the anterior side of the shoulder and rub the medial side down to intracarpal cross striation. Repeat the procedures about 30 times to get a warm sensation in the arm. (Figure 18)

③ Rubbing the Hand and Twirling the Knuckles

Apply the major thenar eminence of one hand on the back of the other and rub to get the intermetacarpal muscles warm. Then with the thumb and index finger of one hand, twirl the interphalangeal joints of the other hand one by one. (Figure 19)

Function:

These manipulation can be used to prevent and treat scapulohumeral periarthritis, subacrominal bursitis, tennis elbow, wrist tenosynovitis and other disorders of the upper limbs. They are also effective for relaxing the muscles of the upper limbs, relieving fatigue and improving the motor function of the upper limbs and for the prevention and treatment of occupational injury.

➤ Health Care of the Lower Limbs

Manipulation:

① Pressing - Kneading the Points on the Legs

Press and knead hard the points, with the whorled surface or the tip of the thumb the tip of the middle finger, in the order of Juliao(ST 3), Huantiao(GB 30), Futu(ST 32), Zusanli(ST 36), Yanglingquan(GB 34), chengshan(UB 57) and Sanyinjiao (SP 6), for about 20 times each. Try to get the feeling of qi. (Figure 20)

② Pressing - kneading the Thigh

Press and knead hard the muscles of the lateral, medial and anterior sides of the thigh from above to below with the palm roots for 3-5 times to get the sensation of soreness and distention. (Figure 21)

③ Pressing - kneading the knee-cap

Stretch the legs naturally with the muscles relaxed. Carry out grasping-pinching and pressing-kneading with the thumb and the radial surface of the index finger, which is bent like a bow, on the knee-caps. (Figure 22)

④ Grasping the Shank

With the thumb and tip of the index and middle fingers, conduct lifting-up, grasping, pinching and kneading manipulations gently on the gastrocnemius muscle from above to below to Achilles tendon, for about 10 times. Try to get the sensation of soreness and distention. (Figure 23)

⑤ Patting the Lower limb

Pat the leg with the centres or the roots of palms with forces in the opposite directions from the bend of the upper thigh to the lower part of the shank for about 10-15 times. (Figure 24)

⑥ Scrubbing Yongquan(K 1)

Scrub hard and rapidly the point Yongquan(K 1) at the sole with the minor thenar eminence. Use the right hand to rub the left foot and vice versa for about 30 times each to get the point hot.(Figure 25)

⑦ Rocking the ankle Joint

Sit upright. Hold the malleolar part with one hand and the metatarsophalangeal part with the other hand. Rotate the ankle joint clockwise and counterclockwise for about 20 time each. (Figure 26)

Function:

These manipulations are effective for the prevention and treatment of injury of the superior cluneal nerves, strain of the gluteal fascia, swelling and pain in the knees, systemma and injury of the ankle joints. It may also help to relax the muscles of the lower limbs, relieve fatigue, improve the motor function of the lower limb joint and prevent various kinds of occupational injuries. Besides, kneading Zusanli(ST 36) and Sanyinjiao(SP 6) and scrubbing Yongquan(K 1) in combination with the manipulation operated on abdomen and head are salutary to the digestive, urinary, reproductive and central nervous systems.

3.7.1.3. Health Care of the Chest and Abdomen

➤ Health Care of the Chest

Manipulation:

① Pressing - kneading the points at the chest and intercostal Space with the cushion of the middle fingers. Press and knead Tanzhong(REN 17), Zhongfu(LU 1), Rugen(ST 18) and Rupang for 20 times each. Then press and knead hard very intercostal space starting from the one on the infraclavicular part, from the midline to the sides and from above to below, to get the sensation of soreness and distention. (Figure 27)

② Grasping Muscles of the Thorax

Apply one thumb tightly against the chest and the index and middle fingers against

the side of it below the armpit. Lift up and down the anterior axillary fold at the lateral side of the greater pectoral muscle. The lifting-up-and-down should be cooperated with slow and gentle pinching and kneading movements. Do it 5 times each session.(Figure 28)

③ Patting the Chest

Make one hand a “hollow” fist and hit the chest with it from above or below along the thoracic line and the breast median lines for about 10 times each. Holding breath while hitting should be avoided. (Figure 29)

④ Scrubbing the Chest

Apply the major thenar eminence or the whole palm of one hand tightly against the chest surface and scrub hard to and fro horizontally for about 20 times. The proper manipulation should produce a feeling of warmth. (Figure 30)

Function:

These manipulations may be applied to the prevention and treatment of pain in the chest on breathing and chest pain, stuffiness in the chest, cough, dyspnea, disorder of functional activities of qi as well as palpitation.

➤ Abdominal Health Care

Manipulation:

① Pressing - kneading the points on the abdomen

By means of the tip of the middle finger or the major thenar eminence or the palm root, press and knead Zhongwan(REN 12), Zhangmen(LIV 13), Tianshu(ST 25), Qihai(REN 6), Guanyuan(REN 4) and Zhongji(REN 3) for about 20-30 times each. Try to get the feeling of qi during manipulation. (Figure 31)

② Rubbing the Abdomen

Move the palm of one hand around Zhongwan(REN 12), Shenque(REN 8) and Guanyuan(REN 4) clockwise and then counterclockwise for about 30-50 times respectively each. (Figure 32)

③ Scrubbing the Lower Abdomen

Apply the ulnar sides of the minor thenar eminences against the two points of Tianshu(ST 25) about 2 cun beside the navel, rub up and down for about 30 times. (Figure 33)

④ Pressing the Points Digitally

Carry out digital-pressing with the middle finger of one hand on Qihai(REN 6), Guanyuan(REN 4) and Zhongji(REN 3) for about 30-50 times respectively. A feeling of distention and tingle which transmits to the external genital organs is desirable.

Function:

These manipulations are effective for prevention and treatment of discomfort in the stomach, indigestion, constipation, pain in the abdomen, irregular menstruation and impotency.

➤ Health Care of the Back and Lumbosacral Portion

Manipulation:

① Pressing - kneading the Neck and Back

First, use the tips of the index, middle and ring fingers of both hands to press and knead from Fengchi(GB 20) at both sides downward via Tianzhu(UB 10) to the root

of the neck for about 5-10 times; then with the tips of the three fingers of one hand push from Fengfu(Du 16) down to Dazhui(Du 14) for 5-10 times. Stop pushing at the points to press and knead hand to press each. Lastly, use the middle finger of one hand to press and knead Dazhui(Du 14), Dazhu(UB 11), Shenzhu(DU 12), Fengmen(UB 12) and Feishu(UB 13) for about 30 times at each session. It is desirable to get a feeling of soreness and distention. (Figure 34)

② Patting the Back

Pat the right side of the back with the left palm and vice versa alternatively for about 10 times each. (Figure 35)

③ Hitting Jianjing(GB 21)

Sit upright or stand erect with the back straightened. Make a fist and hit with it the point Jianjing(GB 21) at the opposite side for 20-30 times. Hit the other Jianjing(GB 21) with the other fist for the same times.

④ Rubbing Gaohuang

With the upper body upright, abduct the upper limbs to from an angle of 90 degrees and bend the elbows. Rotate the shoulder joints with the amplitude of the backward movement being as large as possible to stimulate through the rotative movements of the scapula, the points, such as Gaohuang (GB 43), located the lateral to the interscapular region. (Figure 36)

Function:

These manipulations are effective for the prevention and treatment of pain, soreness and distention in the back, cervical spondylopathy, stiffneck, cough, asthma, accumulation of phlegm, consumptive diseases, stiffness and pain in the chest, palpitation and angina pectoris.

➤ Health Care of the Waist

Manipulation:

① Kneading the Points at the Waist

Clench the first and knead hard with the knuckles of metacarpophalangeal of the index fingers the paired points of Shenshu(UB 23), Zhishi(UB 52) and Yaoyan(Extra) of about 30 times each. Try to get the feeling of soreness and distention. (Figure 37)

② Thumbing and Vibrating the Lumbar Region

Clench the firsts and thump with their ulnar side along the three lines: from Shenshu(UB 23), to Pangguangshu(UB 28), from zhishi(UB 52) via Yaoyan(Extra) to Baohuang(UB 53) and from mingmen(DU 4) to the lumbosacral joint respectively for 5-10 times each to provide vibrations to the waist. (Figure 38)

③ Scrubbing the waist

Stick the two palms tightly on the skin of the waist and rub-scrub with them up and down from the second lumbar vertebra to the sacroiliac articulation till the region is hot. (Figure 39)

Function:

These manipulations can be used to prevent and treat soreness and pain in the loins caused by various factors, general weakness, insomnia, impotency, frequency of micturition, proliferation of the lumbar vertebrae, prolapse of lumbar intervertebral disc, lumbar muscle strain, irregular menstruation and diarrhea. It also functions in

smoothing the loins, relieving fatigue and strengthening the motor function of the lumbar region.

The local self-massage manipulations introduced above may be carried out in different ways for different purposes. For general health care, one can carry through these procedures once or twice a day in the order of : head and face → neck→upper back → chest and abdomen →lumbosacral portion → lower limbs. For local health care or treatment of diseases in a certain part or certain organ of the body, one can select some of the above manipulations according to needs. For those engaged in professions which may easily cause regional fatigue or injury that affects their working efficiency, and for those who get occupational diseases easily, self-massage of the related areas can be conducted to raise the working efficiency or prevent occupational diseases. For example, dancers、 long-distance runner or workers who have to stand long may carry out self-massage of the lower limbs every day before and after training or working, method otherwise called “professional self-health-care massage”.

3.7.2. Self-therapy Massage

Self-massage for self-treatment of diseases through differential selection of certain effective points and portions to make up a prescription of massage treatment is called “self-therapy massage”.

Self-therapy massage can be applied not only as an auxiliary procedure for treatment of some diseases, but also as an important means of auto rehabilitation from many chronic diseases.

① Headache

Press-knead Yintang(Extra 1) 30 times, push the forehead on either side 30 times, press-knead Taiyang(Extra 2) 30 times, wipe the temples 30 times, press-knead Fengchi(GB 20) 30 times, thump Jianjing (GB 21) 30 times and nip-knead Hegu (L 14) 30 times.

② Chronic Gastritis

Press-knead Zhongwan(REN 12) 30 times, rub Zhongwan (REN 12) clockwise and counterclockwise 30 turns respectively, scrub the hypochondria 30 times, and press-knead Pishu(UB20), Weishu(UB 21), Neiguan(P 6), Shousanli(LI 10) and Zusanli(ST 36) 30 times each.

③ Chronic Lumbago

Press-knead Pishu(UB 12), Shenshu(UB 23), Zhishi(UB 52) and Dachangshu(UB 25) 30 times each. Thump-hit the lumbar region 10 times, scrub Yaoyan (Extra) 30 times, and scrub horizontally the lumbosacral portion till it gets hot. Press-grasp Weizhong(UB 40) and Chenghan(UB 57) 30 times each. Incline yourself forward, backward, left and right, and rotate your waist to cooperate with the massage.

④ Dysmenorrhea

Press-knead Shenshu(UB 23) 30 times, thump the lumbar region 30 times, scrub Yaoyan (Extra) 30 times, press-knead Qihai(REN 6) and Guanquan(REN 4) 30 times each, scrub the lower abdomen 30 times, rub Dantian 30 times and press-grasp Hegu(LI 4), Press-knead Zusanli(ST 36) and Sanyinjiao (SP 6)30

times each.

4. Qigong(TCM) (Chunpeng Yao, 2010)

Teaching Methodology of Qigong of Traditional Chinese medicine states.

4.1. A brief history of Qigong(TCM)

In TCM books, qi is always mentioned in the same breath with blood and body fluid, for they are all the fundamental substances constituting the human body and maintaining its life activities. However, among them qi is particularly important for the human body. That is why TCM often explains the life activities of the human body in the viewpoint of qi. For this reason, ZhangJingyue said: "Man's life relies entirely upon this qi." Classic on Medical Problems states:"qi is the root of the human body; once the root is damaged, the stem and leaves would turn withered". And, also, Basic Questions points out : "One's life is the combination of qi of heaven and earth".

Being an art of self-training in both physical and mind exercise as well as sending forth external qi(waiqi), created by the Chinese people in the long process of life in labour and fight against diseases and senility, qigong has functions of preventing and curing diseases, protecting and strengthening health and prolonging life. It is one of the gems in the treasure-house of China's cultural heritage as well as a component part of traditional Chinese medicine together with the acupuncture and Tuina.

Qigong, as a medical keep-fit activity, has a history of several thousand years in China. In the Han Dynasty, the earliest extant general medical collection in "China-The yellow Emperor's Canon of Internal Medicine" systematically expounded qigong's principles, training methods and effects of divigation. For instance, "Remain nonchalant and void, then genuine qi will follow; keep a sound mind, how can diseases come on"; Exhale and inhale essence qi, concentrate the spirit to keep a sound mind, the muscles and flesh unite as one"; "Those suffer from a lingering kidney disease can face the south from 3:00 a.m. to 5:00 a.m., clear the mind of all stray thoughts, hold breath without respiration for seven times, swallow the breath by slightly craning the neck to send it down smoothly, just as swallowing very hard objects. Having done this for seven times, gulp down the plenty of sublingual saliva" etc..

Qigong is an art and skill to train qi. To be exact it is a method by which the practitioner gets physical and mental self-exercise through playing his subjective initiative. To achieve this aim, the practitioner must associate his mind, postures and breath and act on the whole organism. On one hand, it actively regulates the functional activities of the organism and maintains a dynamic equilibrium by oneself. On the other hand, it enables the body to produce an "energy-storing"reaction, reduce energy consumption and increase energy accumulation, producing the effects of regulating yin and yang, dredging the channels and collaterals and emitting external qi.

Qigong masters have built up rich experience from their training practice through the ages which is summarized as the three key elements of “regulation of body”, “regulation of breath” and “regulation of mind” . “Regulation of body” refers to the adjustment of body postures and relaxation exercise; “regulation of breath” refers to the exercise of respiration and conduction qi; and “regulation of mind” refers to the regulation of mental activities: the exercise of mental tranquilization and mind concentration. Only a close combination and coordination of the three key elements in qigong dirigation can guarantee a fruitful exercise of qigong.

Qigong is divided into two large categories: dynamic qigong and static qigong. Generally speaking, dynamic qigong tends to resort to the movements of the limbs and body to conduct internal qi (neiqi) to flow and circulate; while the later gathers qi into Dantian by concentrating the mind(Elixir Field). However, when qigong divigation reaches certain degree, it is required to achieve “activity in tranquility” and “tranquility in activity”, namely, in the practice of static qigong there should be activity of internal qi(neiqi) as well as tranquility of the body; while in the practice of dynamic qigong there should be relative tranquility of internal qi(neiqi).

The practitioner should choose the dirigation methods according to his own conditions. As to the exercise of one single maneuver, one should be laid on the dynamic and static association of the body with internal qi(neiqi) so as to achieve better training effects.

Qigong is a Chinese traditional breath training way for the purposes of prevent or heal the disease and for developing the potential power of human body.

4.2. The selection of qigong exercises

4.2.1. For instance, a simple qigong method is introduced as following, it can help a person relax his body and concentrate his spirit before dances. Stand up and close the eyes. Put your hands on the abdomen. Image that your hands are on a balloon. Image that the balloon expands with your inhale, and your hand on the balloon are expanded also with it. Hold your breath for 5 seconds and fully exhale then. Image that your hands express the balloon to extrude the air outside it with your exhale.

4.2.2. Heavenly circuit self-rotation qigong, also referred to as Magic Wheel Self-Rotation or Yard Circulation, is a maneuver which takes the navel as the center, coordinates silent reading of words or sentences with mind will and respiration to conduct qi to circulate. It can be used to rehabilitate and protect health and treat chronic discases.

- Preparations: Assume the sitting or supine posture, relax the whole body, breathe naturally, raise the tongue tip against the hard palate, and concentrate the mind on the area of the navel.
- Take the navel as the center, when inhaling, activate the abdominal muscles, conduct qi with mind to rotate upward and leftward from the lower portion of the right abdomen, silently reading “The white tiger hides in the east”, when exhaling, conduct qi to rotate from the upper portion of the left abdomen, silently reading”The blue dragon shelters in the west”. Circulate for a circle in this way.

Take the navel as the center, rotate from small circles to large ones (clockwise), for 36 circles altogether up to the sides of the abdomen. Then rotate in the opposite direction; when inhaling, rotate upward and rightward from the left lower abdomen, silently reading "The white tiger hides in east" (rotate counterclockwise). Rotate in this way from large to small circles for 36 times and return to the navel. The whole process makes up one course of training.

- In the beginning, conduct qi to rotate with respiration and the power of the abdominal muscles. When well-trained, one can conduct qi to rotate round the navel with mind alone. When the training practice is finished, rub the abdomen with the palms clockwise for 36 times, and counterclockwise for 36 times, and close the training.

Tai Chi (Appendix---Taichi 24 styles) is a form of Qigong exercises. In Chinese philosophy and medicine there exists the concept of 'chi', a vital force that animates the body. One of the avowed aims of Tai Chi is to foster the circulation of this 'chi' within the body, the belief being that by doing so the health and vitality of the person are enhanced. This 'chi' circulates in patterns that are close related to the nervous and vascular system and thus the notion is closely connected with that of the practice of acupuncture and other oriental healing arts.

Chapter2 Chinese traditional techniques in dances training for preventing injuries

In China, Dance calls on one important words "Control", to have control of your body. "Control" is very important in Chinese dance. And It incorporates aspects of internal control and outer control. These characteristics also can be generalized as "the holistic concept". By "the holistic concept" is meant a general idea of the unity and integrity within the human body. I will introduce Chinese traditional exercises in order to discuss and analysis this problem "Control". Internal control is Control the Breath and Outer control is Control the Body.

Teaching Methodology of Shen Yun (figure 2) of Chinese Classical Dance states: "If you are a professional dancer or wish to be one, it is important to be aware of the reality of injury. It is equally important to realize that injuries can often be prevented. If you have never been sidelined by injury, a balance musculature and awareness of your body can keep you healthy. If you have recovered from injury, the following suggestions may help you avoid a recurrence.

All these movements of Shen Yun are to follow "Sources from the heart, Start with waist, expression in body". (Tang Mancheng, Jin Hao, 2004, 34-39). Shen Yun is one of the major components of Chinese classical dance and may be roughly translated as "body rhythm," "appeal," or "characteristic style." This course introduces the basic terminologies and elements in Shen Yun, including steps; hand and arm movements; postures; and the concepts of Ning, Qing, Yang, Ping Yuan, Li Yuan, Ba Zi Yuan, and Dian, Xian, Mian. Upon completion of this course, students should be able to strike a good balance between Shen (physical forms) and Yun (style, inner spirit, and

emotions). Basic Rhythm Elements of Shen Yun include Ti and Chen, Chong and Kao, Han and Tian , Yi, PangYi.

The traditional Chinese dances believe that the breath in dances should be paid very importance attention. Every action in the Chinese classical dances should be controlled by the rhythm of exhale and inhale breath. If doing so, actors easy to prevent injury in dances. Breath control is important in body training. For instance, expanding action should go on with the inhale, crouch action should go on with the exhale. Breathing control is important in expression in dance. For instance, when expressing the sad feeling, the actor should inhale slowly and exhale rapidly; when expressing the happy feeling, one should inhale and exhale rapidly; and when expressing the angry feeling, one should inhale rapidly and exhale strongly. Breath control is important in action training. In dances, some action need explosive force and some action need soft and graceful control. These different actions should go with specific breath styles.

China has 56 nationalities, each of which has its own characteristics, forming the various folk dance. There are not only beautiful but also have the effects of a more physical rehabilitation. For example: Xinjiang dances is one kind of Chinese folk dances, it is special at its neck action. The training of Xinjiang dances can effectively prevent and heal neck disease. To prevent the injury of waist, one must do exercise to strengthen the power of the muscles supporting the action of waist. And a Chinese folk dance named Yizu dance is special at its waist action, that is a good training to strengthen the control of waist etc.

Part 3 Discuss and Analysis

[Can Chinese body-work methods and medicine help prevention of Injuries in Dance ?](#)

1, Analysis: many factors may promote injury in dancers:

- Sixty-one different types of injuries manifested in the current study and were later classified into seven major categories: knee injuries, tendonitis of the ankle or foot joints, back injuries, bone fractures, joint sprains, stress fractures, and non-categorized injuries. (N Steinberg ,2011)
- Several other factors :
 - 1, Extending joint range of motion for better performance. It has recently been shown that passive joint range of motion is unlikely to improve with age (Steinberg et al., 2006). Nonetheless, young dancers exert considerable physical effort to increase joint range of motion through intense stretching training, which can eventually lead to injury (Askling, Saartok, & Thorstensson, 2006).
 - 2, Controlling growth. Many young dancers try to develop a “fitted” body structure for dancing; they may restrict caloric intake, maintain such an extremely low body weight that their muscles and bones are affected, contributing to the risk of injuries

(White, Philpot, Green, & Bemben, 2004).

3 , Type of exercise. Young dancers should start dancing en pointe only when finishing their physical development, when their trunk, abdominal, and pelvic muscles (“core” stability) are sufficiently strong for correct posture, and when their leg alignment, strength, and flexibility are adequate (Weiss, Rist, & Grossman, 2009). As the duration and frequency of practice for young dancers are limited, and young dancers have less muscle strength and low coordination, most dancers should start dancing en pointe only after the age of 12 (Hardaker & Erickson, 1987). Unfortunately, even young dancers with no aspirations to become professional practise en pointe (Nunes et al., 2002), most of them become candidates for injuries.

4, Re-injury. Adolescent dancers (13 - 16 years) are more prone to repeated injuries than young dancers (8 - 12 years). Adolescent dancers do not abstain from practice following an injury; very few seek medical treatment; they underestimate the time required for recovery and, together with their higher pain threshold (compared with young dancers), expose themselves to re-injury (Askling, Lund, Saartok, & Thorstensson, 2002).

5, Time between first and second injury. The time between first and second injury gradually decreases with age. Limited data are available regarding the gap between injuries in dancers. Yet, most follow-up studies suggest that past injury greatly increases the risk of future injury (Wiesler et al., 1996; Bronner & Brownstein, 1997). Askling and colleagues (2006) recently suggested that one of the predisposing factors for re-injury is dancers’ self-confidence. According to these authors, this mental condition arises from the gap between the objective condition of the dancers’ muscles and joints (which had already returned to their normal level) and their subjective feeling regarding their fear of returning to full dancing activity, following their past experience.

Nonetheless, the findings of Askling and colleagues (2006) should be treated with caution, as they are observational rather than causal. Furthermore dancers are known to have low self-confidence because of the subjective nature dance.

6, Reluctance to seek help. Most dancers do not seek medical attention for their injuries, and continue dancing with chronic injuries for fear of losing their position in the dance company and the belief that it will end their career (Byhring & Bo, 2002).

2, Discuss: Several Methods

✧ To prevent the injury of neck

Shake the head on the four directions of ahead, aback, left and right. Extend and shrink the head by force carefully. Doing these exercise can prevent the injury of neck in dances. But some other points should also be noticed. Warm-up the neck joint carefully before the performance, especially in cold weather; move the neck in dances should start slowly; actors should concentrate his attention in performance to prevent

accident; the height of pillow should be suitable is also important for protecting neck. Xinjiang dances is one kind of Chinese folk dances, it is special at its neck action. The training of Xinjiang dances can effectively prevent and heal neck disease.

✧ To prevent the injury of waist

To prevent the injury of waist, one must do exercise to strengthen the power of the muscles supporting the action of waist. The warm-up preparation before the dance is also very important. Besides that, the following points are also paid much attention in Chinese traditional dance training. To protect the waist, one must notice to keep the warm and dry of this part. Especially after dancing, one should clean the sweat on waist and take on dry cloths in time. After dances, relax the muscles near waist immediately is a very good method to prevent injury in the whole dance career. The relaxing ways include massage and using some Chinese medicine wines. In the dance training for children, the child should be taught keep right styles of standing and sitting. A special belt is frequently used for these children to protect their waists in training. On the other hand, a Chinese folk dance named Yizu dance is special at its waist action. So Yizu dance is a good training to strengthen the control of waist.

✧ To prevent the injury of hip injuries

The moving of cycle turning is a good exercise to prevent the injury of hips. The exercise of half-squat, deep-squat and a series of Chinese traditional kicking actions are also good ways to practise the control of hips. The hips protection is very important in dance training for children. The powerful and frequency of these actions must be suitable for children. And one should notice that the training of the hips for children must take at two sides. Only practise one side for a long time is forbidden.

✧ To prevent the injury of knee injuries

For knees, the first thing is to protect them in training, including keeping warm on knees, wearing kneepad and choose a soft field if possible. The relax and recover after training are also important. In Chinese tradition, massage the muscle of calf, use some special Chinese medicine wine and make some specific acupuncture treatment all will have good effect. In some case the knees have been injured, to move the ankle and feet will help the recovery of knees

✧ To prevent the injury of foot injuries

1. To prevent the injuries of feet, warm up exercise is important, including fully moving the ankle and toes before dances. Strengthen the muscle of legs can decrease the possibility of injuries of feet, for which frog hopping is a good exercise. Choose a comfortable dance shoes for dancing and avoid too high and too thin high-heeled shoes in life are all recommended to protect the feet. If feeling the fatigue of the feet, stop all the training relating to the feet immediately. Insisting to continue is dangerous. Massage and Chinese medicine wines are good for recovery of the feet after dances. Soak the feet in hot water for a while before going to bed is also highly recommended for feet recovery. There are some specific Chinese medicine is for this purpose. In the

training for children, two feet must be same practised. Only use one foot for a long time easy make the child hurt.

2. Traditional Chinese Foot Massage (Wang Guanglan, 2005)

Foot massage is a very safe self therapy. The techniques are easy to learn and simple to do on yourself and others. All you need is a chair and an acupuncture map of the foot so you can locate the pressure points and reflexology areas.



Figures 1-5: Foot reflexology

➤ What is Foot massage?

Foot massage is one of the most unbelievably relaxing treats that you can give yourself or others. The ultimate study of foot massage is reflexology.

Foot reflexology is "pressure therapy" and involves applying focused pressure to certain known reflex points located in the foot to cure or prevent disease. Foot reflexology is based on the premise that our nerve zones or reflex points go from the bottom of our feet to the top of our head, encompassing all vital organs on the way. A trained reflexologist can put pressure on different meridians or energy lines on the sole and side of the feet to determine the cause of illness.

➤ What are the benefits of Foot massage?

Each part of the foot is reputedly linked to another, often distant, part of the body, with influence extending not just to the muscles but also to the vital organs as well. There are many benefits of this type of massage, including the most basic: it feels

good. The feet are many times the hardest worked of all body parts. They are what hold your weight up all day long, and the longer you walk or stand, the more tired they will become. By receiving a foot massage, the patient can experience relaxation as well as pain relief.

As well as the most basic benefits, there are many other benefits to foot massage as well. Take zone reflex therapy as an example: the belief in this type of foot massage therapy is that the beginning of all reflex zones is in the feet, and by rubbing and manipulating these areas of the feet, healing can occur. Based on this belief, a regular foot massage could also have healing qualities because the necessary zones may be rubbed and manipulated (even if it is unintentionally).

Another benefit is the release of stress. There have been studies performed on patients of heart surgery that showed there was a significant decrease in the stress of patients after a foot massage. This could mean that a foot massage not only causes relaxation due to less stress, but better health as well. Since heart disease is linked with mental well-being (i.e. too much stress can lead to a heart attack), the foot massage can be indirectly causing better overall health, as well as recovery and prevention.

➤ History of foot massage

Foot massage or foot reflexology has a Chinese origin. It dates back to more than 3,000 years ago and is used in the prevention and cure of many health ailments. Some say foot massage dates back to ancient Egyptian times due to archaeological findings in cave drawings in Egypt.

➤ The principle of foot massage

The principle of foot massage rests in the premise that the meridian network connects all tissues, organs and cells in our body. Each organ in the body is connected to a specific reflex point on the foot through the intermediary of 300 nerves.

A trained foot reflexologist can put pressure on different meridians or energy lines on the sole and side of the feet to determine the cause of illness. By using pressure to these the reflex points, a foot massage is good for stimulating the activity of internal organs, and improving blood and lymph circulation. The top to bottom well being of a person can be made through the foot.

➤ Different

The principles of foot massage are not in congruence with western allopathic medicine. Western medicine sees the foot as a body part comprising of bones, ligaments and joints. However, foot massage is fast gaining much popularity and acceptance as an alternative health Treatment, Fans of foot massage believe it can cure not only colds and minor ailments, but more serious ailments as well. These ailments include liver dysfunction, constipation problems, chronic headaches, skin allergies, etc.

Foot reflexology is a holistic treatment. It concentrates on treating the whole person rather than just the symptoms of one particular ailment. It can be slow and gradual. A series of visits is necessary to strengthen the body and to bring the body back to

balance.

Part 4

How to train dancers, avoiding injuries and improving health care.

There are many ways the body maybe used as content in dance education. First, of course, the study of experiential anatomy and kinesiology in basic.(Green.J, 2002) In my opinion, I think knowing your body is important for the dancers. It is necessary to know how the body is put together, differences in body type as they relate to movement, and the kinds of actions possible in joint areas throughout the body. The study of experiential anatomy 、 kinesiology and pathophysiology must be brought directly into dance classes.

For example, on the elementary school level, while students learns to identify and move specific body parts, they may be given direction that allow them to explore the range of movements and kinds of positions possible with that body part. (Green.J, 2002) The can also begin to learn to focus proprioceptively on particular body parts and bodily processes such as breathing(Shen Yun, Tai chi etc.) and energy flow through the body. High school students can begin to learn anatomical principles through texts such as Bodystories and application of principles through movement exploration too. (Green.J, 2002)

The knowledge of traditional Chinese medicine (TCM) is discussed in order to identify potential dangers in dance and to prevent the possible injuries. Even if injury happened, by means of Chinese medicine, the dancer could rapidly return their prior level without permanent action limitation. I think Self-Massage of Traditional Chinese medicine is especially important brought into dance class. In my dance class I will teach some self-massage. As for life and health care for oneself, the massage means is so practical, simple and safe that everyone can practice at home to relieve or ease the diseases and pains. Once dancers learn the techniques involved, acupressure can be self-administered before the actual warm-up、 after the actual cold-down、 in the dance class or at home as required, thus reducing the dependence of dancers on clinic visits. Dancers can also use self massage almost all of the body: on their legs, their face, their hands and even their ears etc .

For example, After the actual cold-down or at home as required, the dancers can use self-foot-massage :

Bathed feet in warm water for 10-15 minutes, and dried themselves with a towel.

1. Sit on a firm but comfortable chair, or on the edge of your bed.

Lift one foot and rest it on the knee of the other leg so that you can see the bottom of your foot.

Note: The image on the right has been rotated vertically for easy viewing.

Keep your back as straight as you can, i.e. try not to slouch over your foot.

2. Using your Acupressure Foot Chart as a guide, locate a point that you want to massage.



Figures 1-6: Yong Quan

For example: The point shown above is known in traditional Chinese medicine as Yong Quan, or Kidney 1 (and sometimes the adrenal reflexology point).

It's the first point on the kidney energy meridian and massaging it has a calming effect on the body.

Use the tip of your thumb to press and knead the point fairly deeply (but not so that it causes excessive pain) for 1-2 minutes. If your thumb gets sore, rest it for a moment then continue.

Repeat on the other foot, using the other thumb.

Massage this point when you need to relax, or just before bed to help you sleep.

3. Repeat step 2 with any other point(s) you wish to massage. Choose, say, 3-4 points, massage them on one foot, then do the other foot.

Massaging of specific pressure points or areas can be done daily. The strength exerted should be appropriate; the manipulation should give one a feeling of local warmth. Self-massage is usually performed twice a day, in the morning and evening, 20-30 minutes each time. Acupressure points do adapt to stimulation though, so after 10 days, stop for 3-4 days, or choose new points to massage.

In addition, self-massage is often done in combination with qigong (breathing exercise) which has synergism with it. In Shanghai and Taiwan, a lot of the dance company, college or University have already teach Tai Chi for dancers. I think Qigong is good fit for college and university programs. And use Qigong to train dancers, maybe it is helpful for dancers to avoid injuries.

1. For instance, a simple qigong method is introduced as following, it can help a dancer relax his body and concentrate his spirit before dances. Stand up and close the eyes. Put your hands on the abdomen. Image that your hands are on a balloon. Image that the balloon expands with your inhale, and your hand on the balloon are expanded also with it. Hold your breath for 5 seconds and fully exhale then. Image that your hands express the balloon to extrude the air outside it with your exhale.

2. Heavenly circuit self-rotation qigong, also referred to as Magic Wheel Self-Rotation or Yard Circulation, is a maneuver which takes the navel as the center,

coordinates silent reading of words or sentences with mind will and respiration to conduct qi to circulate. It can be used to rehabilitate and protect health and treat chronic diseases.

- Preparations: Assume the sitting or supine posture, relax the whole body, breathe naturally, raise the tongue tip against the hard palate, and concentrate the mind on the area of the navel.
- Take the navel as the center, when inhaling, activate the abdominal muscles, conduct qi with mind to rotate upward and leftward from the lower portion of the right abdomen, silently reading “The white tiger hides in the east”, when exhaling, conduct qi to rotate from the upper portion of the left abdomen, silently reading”The blue dragon shelters in the west”. Circulate for a circle in this way. Take the navel as the center, rotate from small circles to large ones(clockwise), for 36 circles altogether up to the sides of the abdomen. Then rotate in the opposite direction; when inhaling, rotate upward and rightward from the left lower abdomen, silently reading” The white tiger hides in east”(rotate counterclockwise). Rotate in this way from large to small circles for 36 times and return to the navel. The whole process makes up one course of training.
- In the beginning, conduct qi to rotate with respiration and the power of the abdominal muscles. When well-trained, one can conduct qi to rotate round the navel with mind alone. When the training practice is finished, rub the abdomen with the palms clockwise for 36 times, and counterclockwise for 36 times, and close the training.

The breath in dances should be paid very importance attention. Every action in dances should be controlled by the rhythm of exhale and inhale breath. If doing so, actors easy to prevent injury in dances. Breath control is important in body training. In my classes, I will also teach Shen Yun(figure 2) of Chinese Classical Dance . All these movements of Shen Yun are to follow “ Sources from the heart, Start with waist, expression in body”.(Tang Mancheng, Jin Hao, 2004, 34-39). Shen Yun is one of the major components of Chinese classical dance and may be roughly translated as “body rhythm,” “appeal,” or “characteristic style.” Upon completion of this course, students should be able to strike a good balance between Shen (physical forms) and Yun (style, inner spirit, and emotions). Basic Rhythm Elements of Shen Yun include Ti and Chen, Chong and Kao, Han and Tian , Yi, PangYi. For instance, expanding action should go on with the inhale, crouch action should go on with the exhale. Breathing control is important in expression in dance. For instance, when expressing the sad feeling, the actor should inhale slowly and exhale rapidly; when expressing the happy feeling, one should inhale and exhale rapidly; and when expressing the angry feeling, one should inhale rapidly and exhale strongly. Breath control is important in action training. In dances, some action need explosive force and some action need soft and graceful control. These different actions should go with specific breath styles.

Chinese folk dance only beautiful but also have the effects of a more physical

rehabilitation. For example: Shake the head on the four directions of ahead, aback, left and right. Extend and shrink the head by force carefully. Doing these exercise can prevent the injury of neck in dances. But some other points should also be noticed. Warm-up the neck joint carefully before the performance, especially in cold weather; move the neck in dances should start slowly; actors should concentrate his attention in performance to prevent accident; the height of pillow should be suitable is also important for protecting neck. Xinjiang(Video1) dances is one kind of Chinese folk dances, it is special at its neck action. The training of Xinjiang(Video1) dances can effectively prevent and heal neck disease. To prevent the injury of waist, one must do exercise to strengthen the power of the muscles supporting the action of waist. The warm-up preparation before the dance is also very important. Besides that, the following points are also paid much attention in Chinese traditional dance training. To protect the waist, one must notice to keep the warm and dry of this part. Especially after dancing, one should clean the sweat on waist and take on dry cloths in time. After dances, relax the muscles near waist immediately is a very good method to prevent injury in the whole dance career. The relaxing ways include massage and using some Chinese medicine wines. In the dance training for children, the child should be taught keep right styles of standing and sitting. A special belt is frequently used for these children to protect their waists in training. On the other hand, a Chinese folk dance named Yizu(Video 2) dance is special at its waist action. So Yizu(Video 2) dance is a good training to strengthen the control of waist.

Certainly, the intention of employing somatic principles in dance education is not to replace movement skill with relaxation or passive muscle usage. However, there are ways that a somatic perspective can be effectively brought into dance class. (Green.J, 2002)

Part 5 Conclusions and Future Work

Conclusions

In TCM the human body is regarded as an organic whole in which its constituent parts are inseparable in structure, interrelated and interdependent in physiology, and mutually influential in pathology. (Chunpeng Yao, 2010) In my opinion, fit to dance , these characteristics can also be generalized as “the holistic concept”. It incorporates aspects of internal control and outer control. Do more Self-massage and exercises of the Chinese folk dance(outer control), and do more Qigong and exercises of Shenyun(internal control), use them before 、 after or in class they can let our body become health and energy. That is to say in another word, they can not only let our body fewer injuries and healing for the injuries in dance, but also this is a easier 、 cheaper、 more practical way to the prevention and healing of dance injuries.

I believe that exercise with little injury is possible. I am interested in researching how to exercise without injury. I contact with informations of the self-massage and

Qigong of the traditional Chinese medicine and traditional Chinese dances (exercises of Shenyun and Chinese folk dance) in order to add a new way to the prevention and healing of dance injuries, and in order to help identify potential problems and prevent future injuries, and the goal is to rapidly return dancers to their prior level of activity with no permanent limitation.

Future Work:

Now, the using scope of this way is small that it has little affect in the world. The next, I want to prove that is effective, and look forward to future promotion.

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Taichi ---24 styles

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Appendix---Medical Glossary

❖ Extra Points:

1. Yin-Tang(Extra 1)

Location: Midway between the medial end of the two eyebrows

Indications: Headache, head heavy, epistaxis, rhinorrhea, infantile, convulsion, frontal headache, insomnia

2. Taiyang(Extra 2)

Location: In the depression about 1 cun posterior to the midpoint between the lateral end of the eyebrow and outer canthus

Indications: Headache, eye diseases, deviation of the eyes and mouth

3. Yaoyan(Extra)

Location: About 3.5 cun lateral to the lower border of the spinous process of the fourth lumbar vertebra. The point is in the depression appearing in prone position

Indications: Lumbar pain, frequency of the urination, gynecological diseases, diabetes

❖ The Stomach Channel of Foot-Yangming:

1. Chengqi(ST 1)

Location: With the eyes looking straight forward, the point is directly below the pupil, between the eyeball and the infraorbital ridge

Indications: Redness, swelling and pain of eye, lacrimation, night blindness, twitching of eyelids, facial paralysis

2. Sibai(ST 2)

Location: Below the Chengqi(ST 1), in the depression at the infraorbital foramen

Indications: Redness, pain and itching of the eye, nebula, facial paralysis, twitching of eyelids, headache, vertigo

3. Juliao(ST 3)

Location: Directly below Sibai(ST 2), at the level of the lower border of ala nasi, on the lateral side of the nasolabial groove

Indications: Facial paralysis, twitching of eyelids, epistaxis, toothache, swelling of lips and cheek

4. Jiache(ST6)

Location: One finger-breadth anterior and superior to the lower angle of the mandible where masseter attaches at the prominence of the muscle when the teeth are clenched

Indications: Facial paralysis, toothache, swelling of the cheek, lockjaw

5. Touwei(ST 8)

Location: 0.5 cun within the anterior hairline at the corner of the forehead, 4.5 cun lateral to Shenting(DU 24)

Indications: Headache, blurring of vision, ophthalmalgia, lacrimation, twitching of

eyelid

6. Tianshu(ST 25)

Location: 2 cun lateral to the centre of the umbilicus

Indications: Abdominal pain and distension, borborygmus, pain around the umbilicus, constipation, diarrhea, dysentery, irregular menstruation, edema

7. Futu(ST 32)

Location: On the line connecting the anterior superior iliac spine and lateral border of the patella, 6 cun above the lateral superior border of the patella, in m.rectus femoris

Indications: Pain in the lumbar and iliac region, coldness of the knee, hernia, beriberi

8. Dubi(ST 35)

Location: When the knee is flexed, the point is at the lower border of the patella, in the depression lateral to the patellar ligament.

Indications: Pain of the knee, beriberi

9. Zusanli(ST 36)

Location: 3 cun below Dubi(ST 35), one finger-breadth from the anterior crest of the tibia, in m.tibialis anterior

Indications: Gastric pain, vomiting, hiccup, abdominal distension, borborygmus, diarrhea, dysentery, constipation, mastitis, enteritis, aching of the knee joint and leg, edema, emaciation due to general deficiency, apoplexy, mania

❖ **The Sanjiao Channel of Hand-Shaoyang:**

1. Yifeng(SJ 17)

Location: Posterior to the lobule of the ear, in the depression between the mandible and mastoid

Indications: Tinnitus, deafness, otorrhea, facial paralysis, toothache, swelling of the cheek, scrofula, trismus

Ermen(SJ 21)

Location: In the depression anterior to the supratragic notch and slightly superior to the condyloid process of the mandible. The point is located with the mouth open

Indications: Tinnitus, deafness, otorrhea, toothache, pain of the cheek and neck

Sizhukong(SJ 23)

Location: In the depression at the lateral end of the eyebrow

Indications: Headache, redness and pain of the eye, twitching of the eyelid, toothache, dizziness

❖ **The Gall Bladder Channel of Foot-Shaoyang**

1. Tinghui(GB 2)

Location: Anterior to the intertragic notch, at the posterior border of the condyloid process of the mandible. The point is located with the mouth open

Indications: Deafness, tinnitus, toothache, mumps, deviation of the mouth

2. Fengchi(GB 20)

Location: In the depression between the upper portion of m. Sternocleidomastoideus and m. Trapezius, on the same level with Fengfu(DU 16)

Indications: Red and painful eyes, tinnitus, epilepsy, rhinorrhea, pain and stiffness of the neck

3. JianJing(GB 21)

Location: Midway between Dazhu(DU 14) and the acromion, at the highest point of the shoulder

Indications: Pain and rigidity of the neck, pain in the shoulder and back, motor impairment of the arm, insufficient lactation, mastitis, scrofula, difficult labour

4. Huantiao(GB 30)

Location: At the junction of the lateral 1/3 and medial 2/3 of the distance between the great trochanter and hiatus of the sacrum (Yaoshu, DU 2). When locating the point put the patient in lateral recumbent position with the thigh flexed

Indications: Pain of the lumbar region, knee and thigh, muscular atrophy of the lower limbs, hemiplegia, Bi-syndrome

5. Yanglingquan(GB 34)

Location: In the depression anterior and inferior to the head of the fibula

Indications: Hemiplegia, weakness, numbness and pain of the lower extremities, beriberi, hypochondriac pain, bitter taste in the mouth, vomiting

6. Gaohuang(GB 43)

Location: 3 cun lateral to the DU meridian, at the level of the lower border of the spinous process of the fourth thoracic vertebra, on the spinal border of the scapula

Indications: Pulmonary tuberculosis, cough, asthma, haematemesis, night sweating, poor memory, nocturnal emission, weakness of the spleen and stomach

❖ **The Urinary Bladder Channel of the Foot-Taiyang**

1. Jingming(UB 1)

Location: In the depression superior to the inner canthus

Indications: Redness, swelling and pain of the eye, itching of the inner canthus, lacrimation, night blindness, blurring of vision

2. Zanzhu(UB 2)

Location: On the medial extremity of the eyebrow, or on the supraorbital notch

Indications: Headache, blurring and failing of vision, pain in the supraorbital region, lacrimation, redness, swelling and pain of the eye, twitching of eyelids

3. Dazhu(UB 11)

Location: 1.5 cun lateral to Taodao(DU 13), at the level of the lower border of the spinous process of the first thoracic vertebra

Indications: Headache, pain in the neck and back, cough, fever neck rigidity

4. Fengmen(UB 12)

Location: 1.5 cun lateral to the Du meridian, at the level of the lower border of the spinous process of the second thoracic vertebra

Indications: Common cold, cough, fever and headache, neck rigidity, backache

5. Feishu(UB 13)

Location: 1.5 cun lateral to Shenzhu (Du 12), at the level of the lower border of the spinous process of the third thoracic vertebra

Indications: Cough, asthma, haematemesis, afternoon fever, night sweating

6. Pishu(UB 20)

Location: 1.5 cun lateral to Jizhong(DU 6), at the level of the lower border of the spinous process of the eleventh thoracic vertebra

Indications: Abdominal distension, jaundice, nausea and vomiting, diarrhea, dysentery, edema, bloody stools, haematemesis, weakness of the spleen and stomach, edema anorexia, backache

7. Weishu(UB 21)

Location: 1.5 cun lateral to the DU meridian, at the level of the lower border of the spinous process of the twelfth thoracic vertebra

Indications: Pain in the chest and hypochondriac and epigastric regions, abdominal distension, borborygmus, regurgitation, nausea, vomiting, weakness of the spleen and stomach

8. Shenshu(UB 23)

Location: 1.5 cun lateral to Mingmen (Du 4), at the level of the lower border of the spinous process of the second lumbar vertebra

Indications: Nocturnal emission, impotence, enuresis, irregular menstruation, leukorrhoea, low back pain due to kidney deficiency, blurring of vision tinnitus, deafness, edema

9. Dachangshu(UB 25)

Location: 1.5 cun lateral to Yaoyangguan(DU 3), at the level of the lower border of the spinous process of the fourth lumbar vertebra

Indications: low back pain, borborygmus, abdominal distension, diarrhea, constipation

10. Panguangshu(UB 28)

Location: 1.5 cun lateral to the Du meridian, at the level of the second posterior sacral foramen

Indications: Retention of urine, enuresis, diarrhea, constipation, rigidity and pain of the lower back

11. Weizhong(UB 40)

Location: Midpoint of the transverse crease of the popliteal fossa, between the tendons of m. Biceps femoris and m. Semitendinosus

Indications: Low back pain, motor impairment of the hip joint, contracture of the tendons in the popliteal fossa, atrophy and pain of the lower limbs, abdominal pain, vomiting, diarrhea, erysipelas

12. Zhishi(UB 52)

Location: 3 cun lateral to Mingmen (Du 4), at the level of the lower border of the spinous process of the second lumbar vertebra

Indications: Nocturnal emission, impotence, dysuria, edema, rigidity and pain of the lumbar and spine

Baohuang(UB 53)

Location: 3 cun lateral to the Du meridian, at the level of the second posterior sacral foramen

Indications: Borborygmus, abdominal, distension, pain in the lower back and spine, urine retention, constipation, swelling of the female pudendum

13. Chengshan(UB 57)

Location: Directly below the belly of m.gastrocnemius, on the line joining Weizhong(UB 40)

Indications: Lower back pain, spasm of the m.gastrocnemius, hemorrhoids, constipation, beriberi

❖ The Large Intestine Channel of Hand- Yangming

1. Hegu (LI 4)

Location: On the dorsum of the hand, between the 1st and 2nd metacarpal bones, approximately in the middle of the 2nd metacarpal bone on the radial side. Or, place in coincident position the transverse crease of the interphalangeal joint of the thumb with the margin of the web between the thumb and the index finger of the other hand. The point is where the tip of the thumb touches.

Indications: Headache, redness, pain and swelling in the eye, deafness, tinnitus, toothache, sore throat, pain of the wrist

2. Shousanli(LI 10)

Location: On the line joining Yangxi (L15) and QuChi (LI 11), 2 cun below QuChi (LI 11)

Indications: Abdominal pain, diarrhea, toothache, swelling of the cheek, motor impairment of the upper limbs, pain in the shoulder and back

3. Quchi(LI 11)

Location: When the elbow is flexed, the point is in the depression at the lateral end of the transverse cubital crease

Indications: Sore and swelling throat, toothache, redness and pain of the eye, scrofula, urticaria, motor impairment of the upper limbs, abdominal pain, vomiting, diarrhea, febrile diseases, depressive psychosis, mania

4. Jianyu(LI 15)

Location: Anterior-inferior to the acromion, on the upper portion of m. deltoideus. When the arm is in full abduction, the point is in the depression appearing at the anterior border of the acromioclavicular joint

Indications: Pain in the shoulder and arm, toothache, rubella, scrofula

5. Yingxiang (LI 20)

Location: In the nasolabial groove, at the level of midpoint of the lateral border of ala nasi

Indications: Nasal obstruction, epistaxis, deviation of the mouth, itching of the face
Yangxi(L15)

Location: On the radial side of the wrist. When the thumb is tilted upward, it is in the depression between the tendons of m. Extensor pollicis longus and brevis

Indications: Headache, redness, pain and swelling in the ee, deafness, tinnitus,

toothache, sore throat, pain of the wrist

❖ **The Lung Channel of Hand-Taiyi**

Chize (Lu 5)

Location: On the cubital crease, on the radial side of the tendon of m. Biceps brachii

Indications: Cough, hemoptysis, afternoon fever, asthma, mastitis

❖ **The Pericardium Channel of Hand- Jueyin**

Quze(P 3)

Location: On the transverse cubital crease, at the ulnar side of the tendon of m.biceps brachii

Indications: Cardiac pain, palpitation, irritability, stomachache, vomiting, pain in the elbow and arm, dry mouth

Neiguan(P 6)

Location: 2 cun above the transverse crease of the wrist, between the tendons of m. Palmaris longus and m. Flexor radialis.

Indications: Cardiac pain, palpitation, stomachache, vomiting, mental disorders, epilepsy, febrile diseases, contracture and pain of the elbow and arm

❖ **The Heart Channel of Hand-Shaoyin**

Shaohai(H 3)

Location: When the elbow is flexed into a right angle, the point is in the depression between the medial end of the transverse cubital crease and the medial epicondyle of the humerus

Indications: Cardiac pain, spasmodic pain and numbness of the hand and arm, tremor of the hand, scrofula, pain in the axilla and hypochondriac region

❖ **The Small Intestine Channel of the Hand-Taiyang**

1. Xiaohai(SI 8)

Location: When the elbow is flexed, the point is located in the depression between the olecranon of the ulna and the medial epicondyle of the humerus

Indications: Headache, swelling of the cheek, pain in the nape, shoulder, arm and elbow, epilepsy

2. Tinggong(SI 19)

Location: Anterior to the ear tragus and posterior to the condyloid process of the mandible, in the depression formed when the mouth is open

Indications: Deafness, tinnitus, otorrhea, toothache, depression, mania

❖ **The Spleen Channel of Foot-Taiyin**

Sanyinjiao (SP 6)

Location: 3 cun directly above the tip of the medial malleolus, on the posterior border of the medial aspect of the tibia

Indications: Abdominal pain, borborygmus, abdominal distension, diarrhea, dysmenorrhea, irregular menstruation, morbid leukorrhea, prolapse of the uterus, sterility, delayed labour, nocturnal emission, impotence, enuresis, hernia, paralysis and pain of the lower limbs, insomnia

❖ The Kidney Channel of Foot-Shaoyin

Yongquan(K 1)

Location: On the sole, in the depression when the foot is in the plantar flexion, approximately at the junction of the anterior third posterior two thirds of the sole

Indications: Headache, blurring of vision, dizziness, sore throat, loss of voice, dysuria, infantile convulsions, feverish sensation in the sole, constipation

❖ The Liver Channel of Foot-Jueyin

Zhangmen(LIV 13),

Location: On the lateral side of the abdomen, below the free end of the eleventh floating rib

Indications: Abdominal distention, borborygmus, pain in the hypochondriac region, vomiting, diarrhea, abdominal mass

❖ The Ren Meridian

1. Zhongji(REN 3)

Location: On the midline of the abdomen, 4 cun below the umbilicus

Indications: Enuresis, nocturnal emission, impotence, hernia, irregular menstruation, dysmenorrhea, metrorrhagia, morbid leukorrhea, sterility, retention of urine, prolapse of the uterus, profuse lochia

2. Guanyuan(REN 4)

Location: On the midline of the abdomen, 3 cun below the umbilicus

Indications: Enuresis, nocturnal emission, frequency of urination, hernia, irregular menstruation, dysmenorrhea, morbid leukorrhea, postpartum hemorrhage, flaccid type of apoplexy, general weakness

3. Qihai(REN 6)

Location: On the midline of the abdomen, 1.5 cun below the umbilicus

Indications: Abdominal pain, enuresis, nocturnal emission, hernia, diarrhea, dysentery, irregular menstruation, metrorrhagia, morbid leukorrhea, postpartum hemorrhage, flaccid type of apoplexy, sterility

4. Shenque(REN 8)

Location: In the centre of the umbilicus

Indications: Abdominal pain, borborygmus, flaccid type of apoplexy, prolapse of

the rectum, unchecked diarrhea, edema

5. Zhongwan(REN 12)

Location: On the middle of the abdomen, 4 cun above the umbilicus

Indications: Stomachache, abdominal distention, borborygmus, nausea, vomiting, diarrhea, dysentery, jaundice, weakness of the spleen and stomach

❖ **The Du Meridian**

1. Yaoshu,(DU 2)

Location: In the hiatus of the sacrum

Indications: Irregular menstruation, pain and stiffness of the lower back, hemorrhoids, muscular atrophy of the lower limbs

2. Yaoyangguan(DU 3)

Indications: Below the spinous process of the fourth lumbar vertebra, at the level with the crista iliaca

Indications: Irregular menstruation, nocturnal emission, impotence, pain in the lumbosacral region, muscular atrophy, motor impairment of the lower limbs

3. Mingmen(DU 4)

Location: Below the spinous process of the first lumbar vertebra

Indications: Pain and stiffness of the lower back, diarrhea, weakness of the spleen and stomach

4. Jizhong (DU 6)

Location: Below the spinous process of the eleventh thoracic vertebra

Indications: Pain in the epigastric region, diarrhea, jaundice, epilepsy, hemorrhoid, infantile prolapse of rectum

5. Shenzhu(DU 12)

Location: Below the spinous process of the third thoracic vertebra

Indications: Cough, asthma, epilepsy, pain and stiffness of the back

6. Taodao(DU 13)

Location: Below the spinous process of the first thoracic vertebra

Indications: Stiffness of the back, headache, malaria, febrile diseases

7. Dazhui(DU 14)

Location: Below the spinous process of the seventh cervical vertebra, approximately at the level of the shoulders

Indications: Neck pain and rigidity, malaria, febrile diseases, epilepsy, afternoon hectic fever, cough asthma

8. Fengfu(DU 16)

Location: 1 cun directly above the midpoint of the posterior hairline, directly below the external occipital protuberance, in the depression between m. Trapezius of both sides

Indications: Headache, neck rigidity, blurred vision, epistaxis, sore throat, post-apoplexy aphasia, hemiplegia, mental disorders

❖ **Dantian (Elixir Field)**

Dantian (Elixir Field) is an area where genuine qi is amassed and stored. Qigong masters thought the ages have different opinions as to the locality of Dantian (Elixir Field). In summarization, it can be classified into Upper Dantian, Middle Dantian and Lower Dantian.

Most qigong master refer to Upper Dantian as “Niwan (Mud Ball)”, believing it to be located inside the acupoint Baihui(Hundred Covergences, DU 20) on the top of the head; while Huangdi's Classic on Medicine calls Upper Dantian “Zuqiao (progenitor Orifice)”, referring to a site 3 cun inside the acupoint Yintang(Glabella, EXTRA 1) in the middle between the two eyebrows(the glabellum). The locality of Middle Dantian is inside the acupoint shanzhong(Middle chest, REN 17) in the middle between the two nipples, called “jianggong (Scarlet Palace)”; but it is also believed by some persons to be located in the navel. The Lower Dantian is located in the lower abdomen below the navel of the human body, usually the area in the upper 2/3 of the line joining the umbilicus and symphysis pubis. It does not refer to a pinpoint, but an area of the lower abdomen; but some others also believe it to be located at the acupoint Huiyin(converging Yin, REN 1) or Yangquan (Pouring Spring, K 1). “Mind concentration on Dantian(Elixir Field)” in Qigong dirigation usually refers to the concentration on Lower Dantian, since this area is most closely related to the life activities of the human body.

In Traditional Chinese Medical theory and Daoists both believe that Lower Dantian is the starting point of the circulation of qi in the Ren Channel(the Front Midline channel), the Du Channel (the Back Midline Channel) and the Chong Channel(the Vital Channel), to be the pivot of the ascending, descending, opening and closing of the genuine qi, “the progenitor of life”, “ the foundation of the five zang and six fu organ”, the root of twelve channels”, the confluence of yin and yang”, “the gate of respiration”, “the country of the convergence of water and fire”, as well as the location where the male store the reproductive essence and the female nourish the fetus. So constant concentration on Dantian(Elixir Field) can achieve the effects of building up health, preventing and curing diseases.

Figures 1

Figure 1-1: The components of physical fitness(One Opinion)

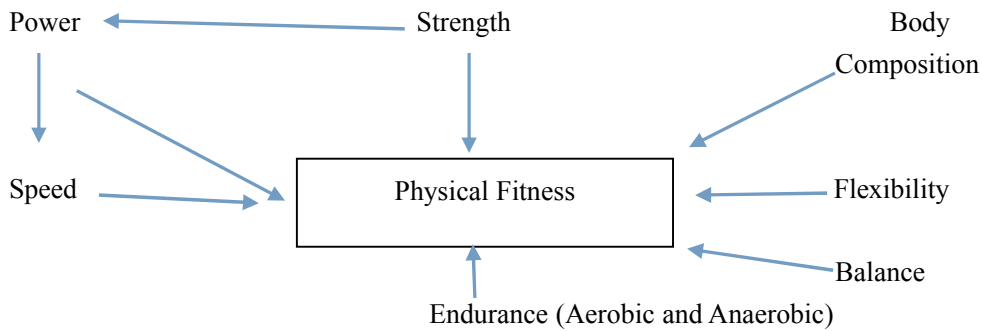


Figure 1-2: Fitness for Dance (The Other Opinion)

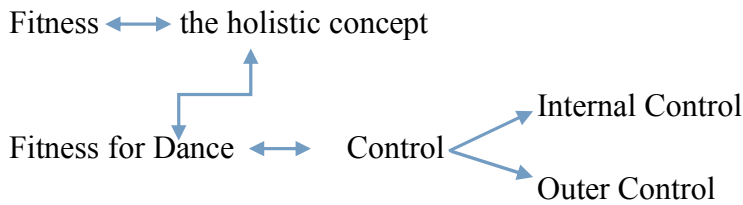
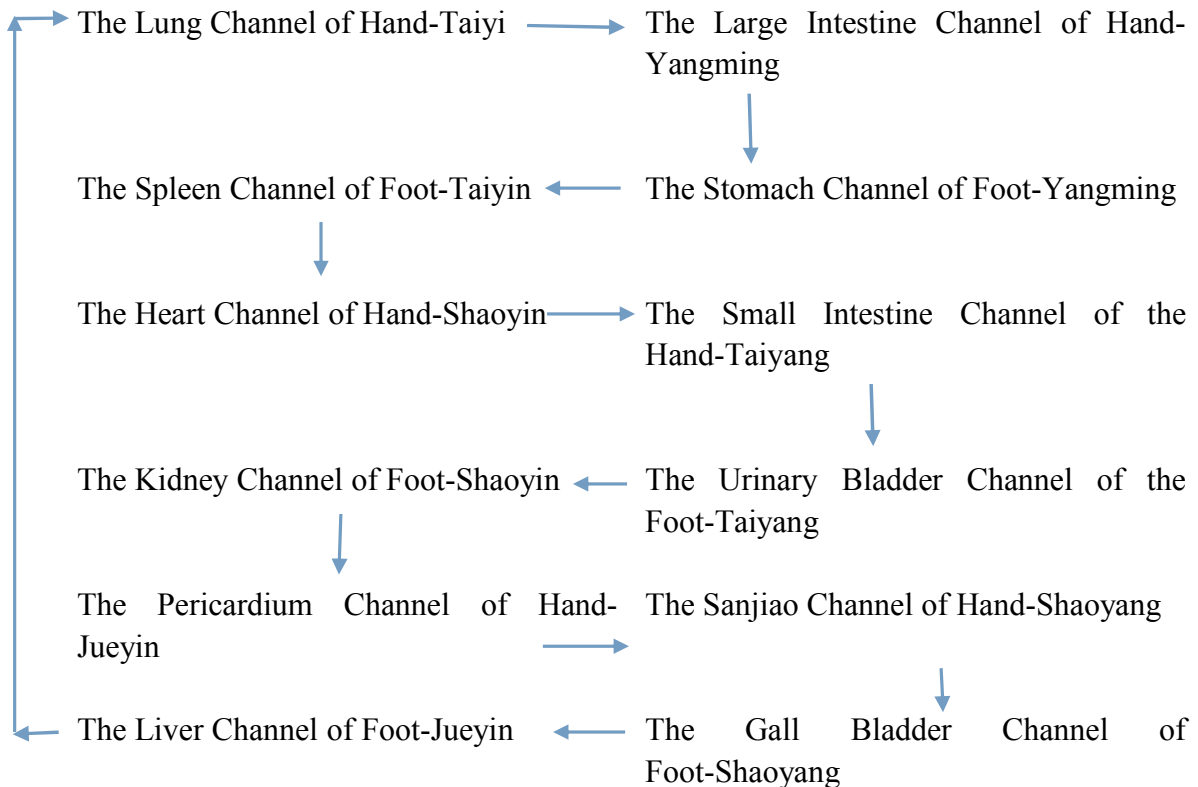
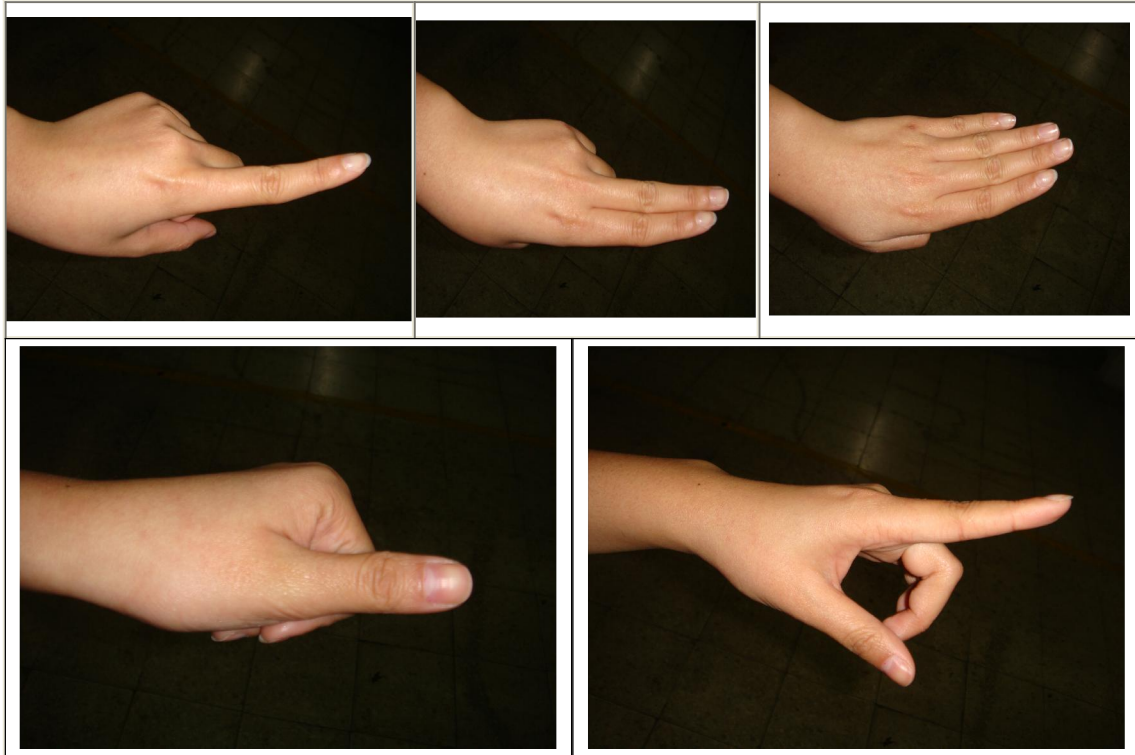


Figure 1-3: Exterior-Interior Relation and Flowing Order of the Twelve Meridians

The meridian of the Zang-organs are Yin channel which belong to the interior. The meridians of the Fu-organs are Yang channel which belong to the exterior.



Figures 1-4: Finger-length Measurement



Figures 1-6: Yong Quan



Figures 1-5: Foot reflexology



Figures 2---Taichi 24 styles

第一式：起势



第二式：野马分鬃



第三式：白鹤亮翅



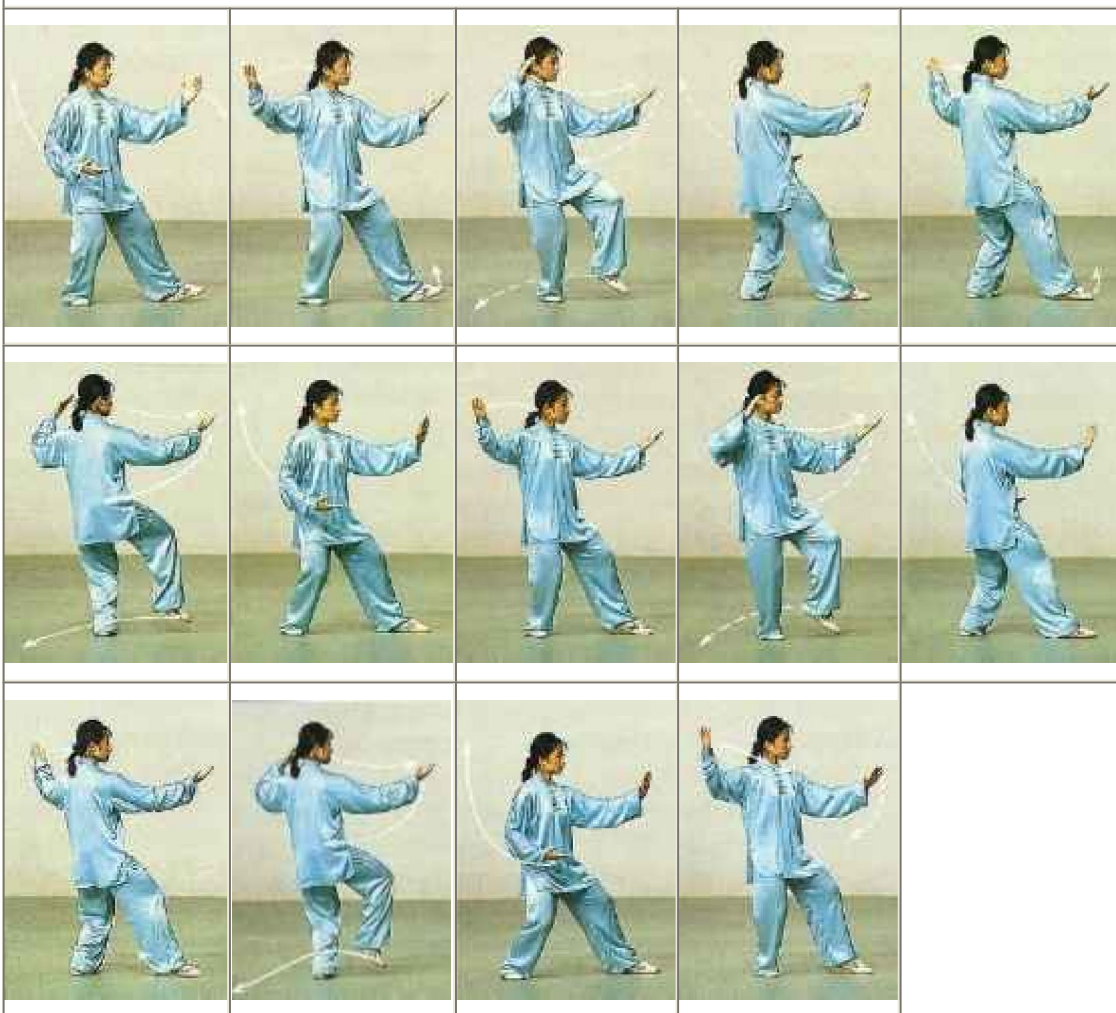
第四式：搂膝拗步



第五式：手挥琵琶



第六式：左右倒卷肱



第七式：左揽雀尾



第八式：右揽雀尾





第九式：单鞭





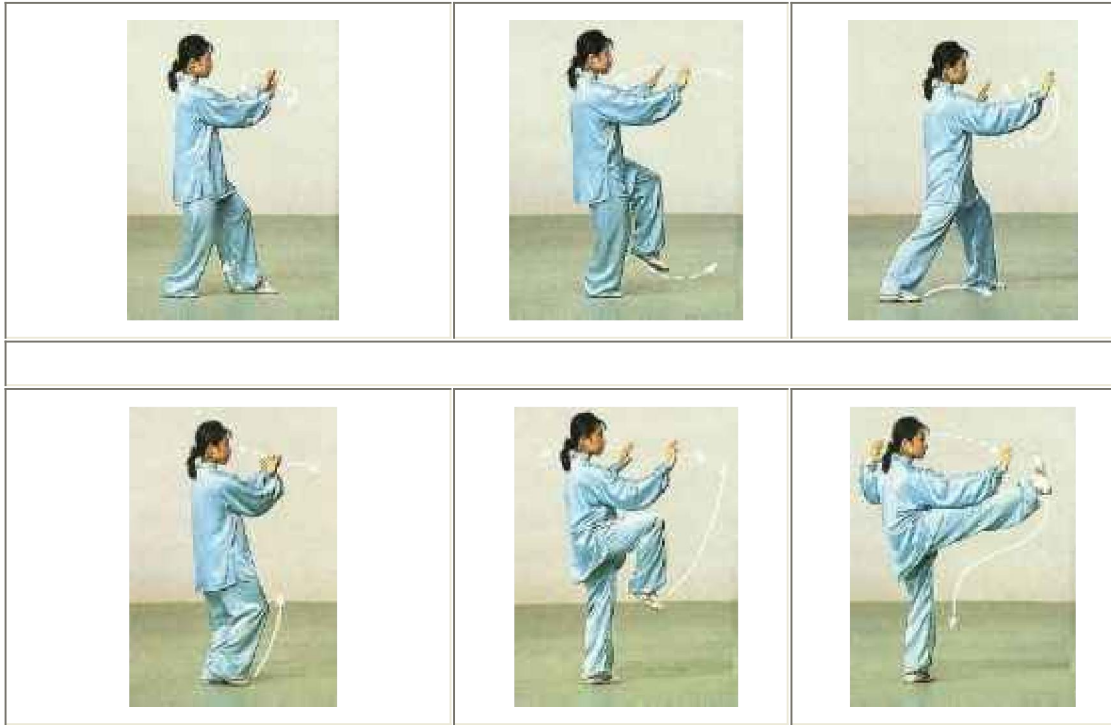
第十一式：单鞭



第十二式：高探马



第十三式：右蹬脚



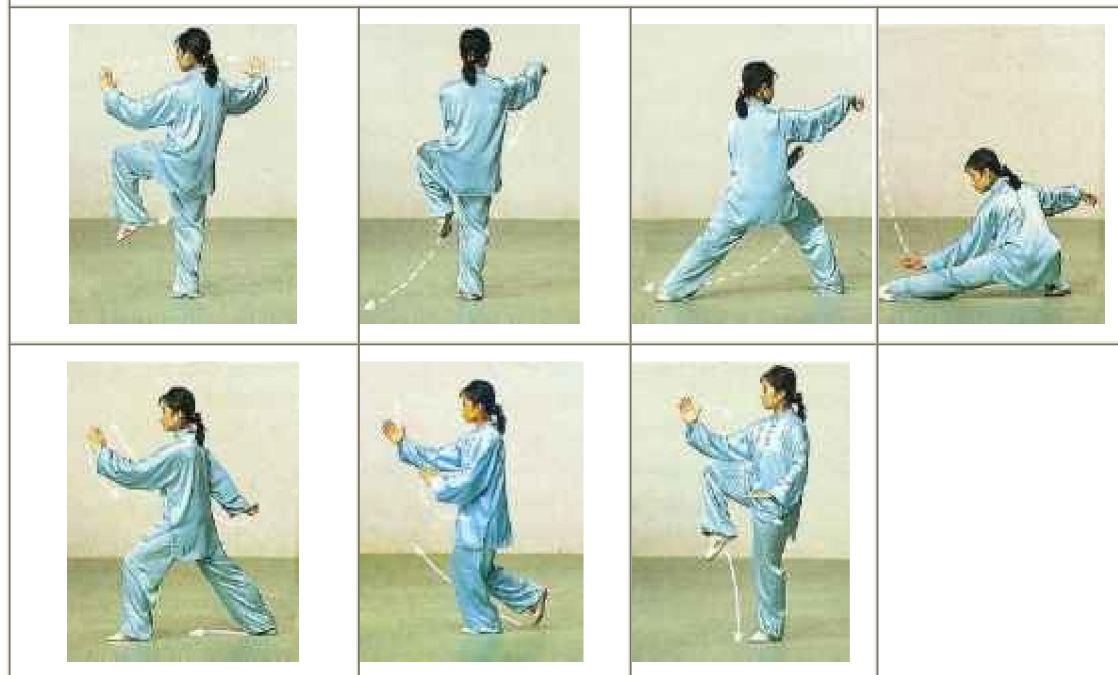
第十四式：双峰贯耳



第十五式：转身左蹬脚



第十六式：左下势独立



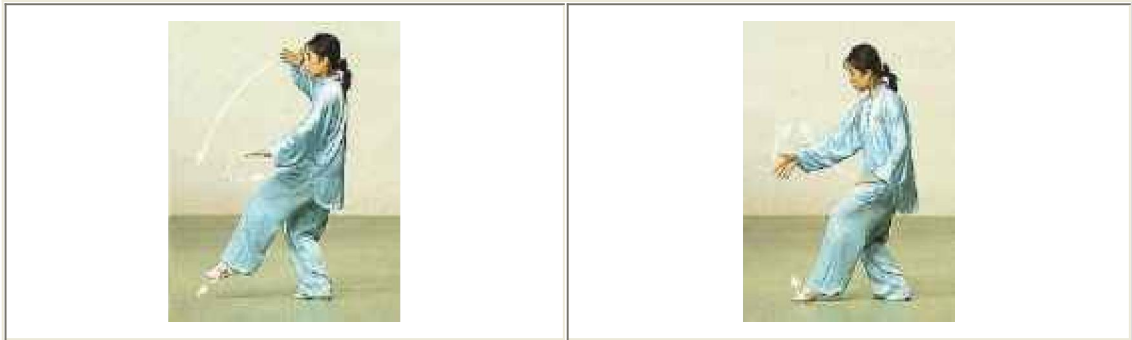
第十七式：右下势独立



第十八式：左右穿梭



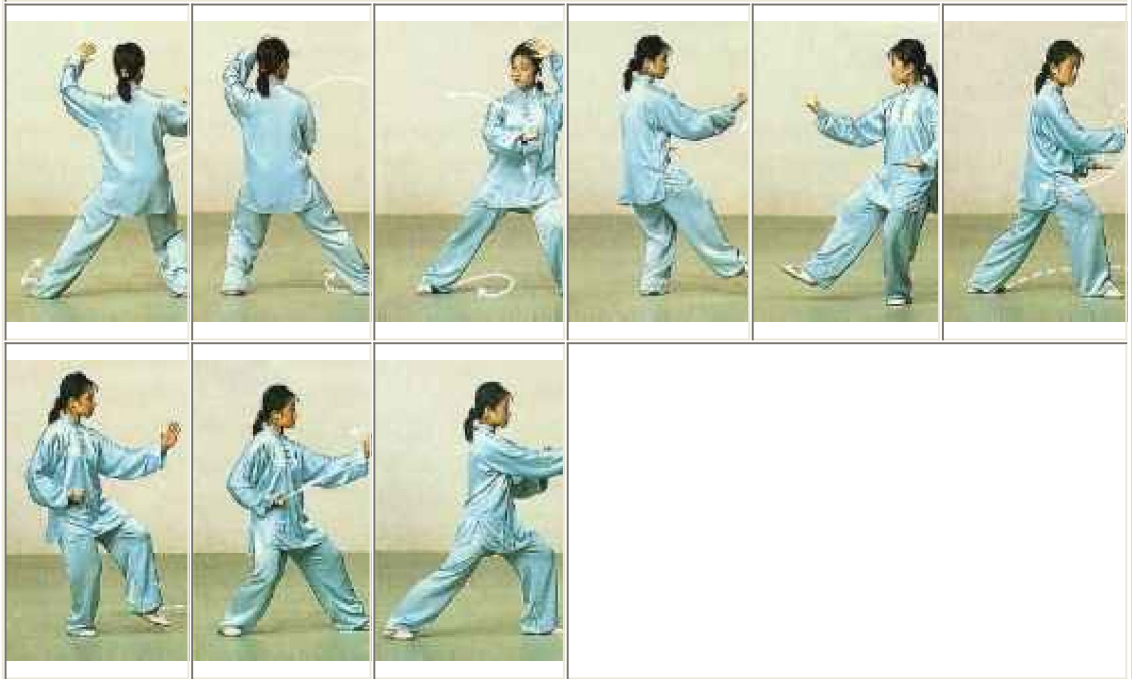
第十九式：海底针



第二十式：闪通臂



第二十一式：转身搬拦捶



第二十二式：如封似闭



第二十三式：十字手



第二十四式：收势



Figures 3 ---Shen Yun



Figures 4 --- Self - Massage





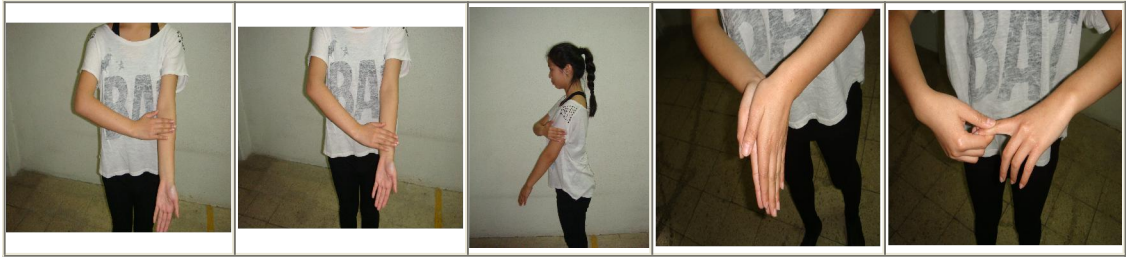
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17-7

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17-9

18-1



18-1

18-1

18-2

19-1

19-2



20-1

20-2

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20-4

20-5



20-5

20-6

20-6

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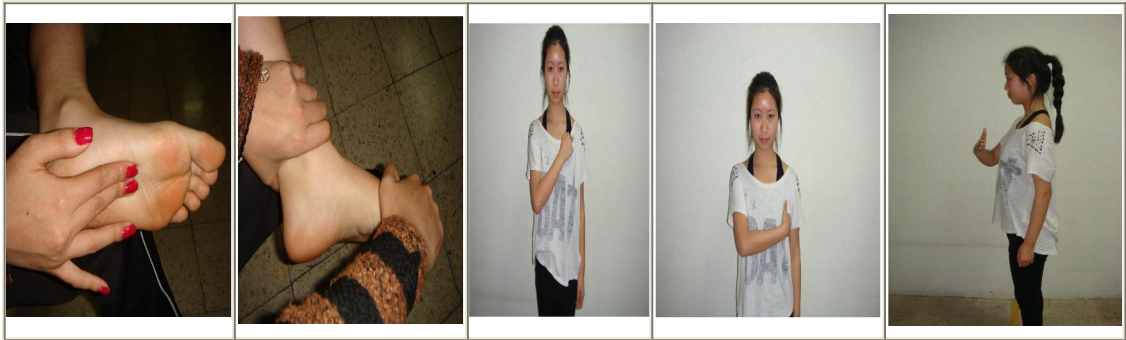
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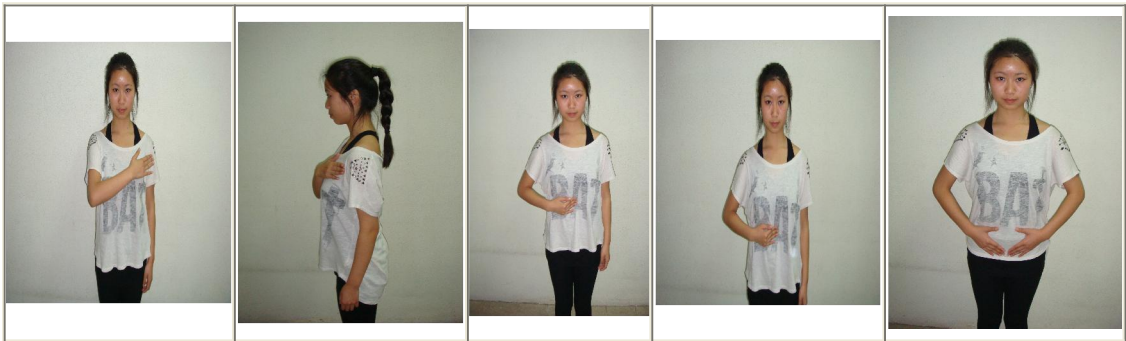
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29-1



29-2

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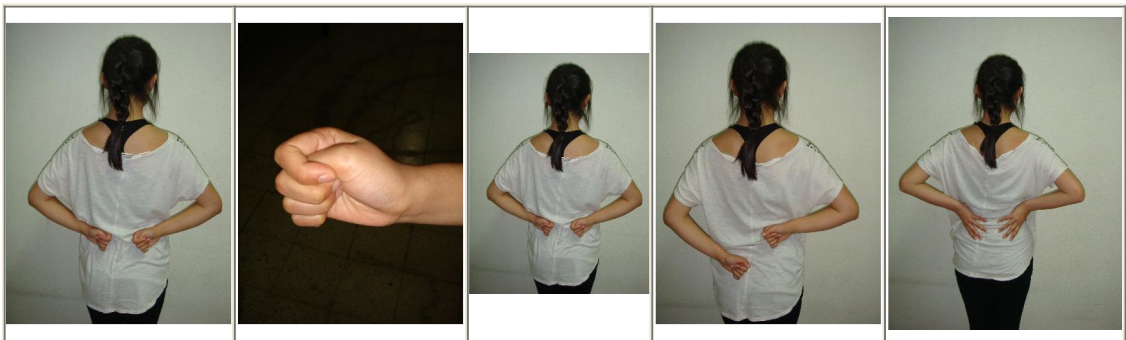
34-1

34-2

34-3

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37-1

37-2

38-1

38-2

39

Tables A

Name: _____ Sex: M _____ F _____
Nationality: _____
Date of Birth: _____ Age: _____
Weight _____ in kg Height _____ in cm
Dance type preferred: _____
How many years of dancing so far: _____
Professional dancer: Yes _____ No _____
For inspecting the colour and lustre of the face:
Blue ___ yellow ___ red ___ pale ___ black ___
Listening to the dancer's voice _____
Listening to the dancer's speaking _____
Listening to the dancer's respiration _____
Listening to the dancer's coughing _____
Listening to the dancer's moaning _____
Asking about Chills and Fever:
Aversion to cold and heat _____; Alternate spell of chills and fever _____
Chills without fever _____; Fever without chills _____
Asking about Perspiration:
The location of sweating _____
The time of sweating _____
The amount of sweating _____
Asking about Diet and Appetite (thirst and drinking appetite and amount of food taste)

Questioning about Pain: Injured body part:
____ Head(includes ears, eyes, nose, and mouth)
____ Neck
____ Back
____ Chest
____ Abdomen
____ Pelvis
____ Arms(shoulder, elbow, wrist, hands) ___left ___right
____ Hip(thigh, knees, calf/Achilles, ankles, feet) ___left ___right
____ Knees ___left ___right
____ Calves or lower leg ___left ___right
____ Ankles ___left ___right
____ Feet ___left ___right
Questioning about Sleep:
How much do you sleep in night? _____(hours)

Tables B

Table 1: Sites of injuries (some dancers)

Neck	23	30	26	11
Shoulders	15	22	23	8
Arms/Hands	10	12	13	5
Upper back	11	24	19	7
Ribs	negligible	4	3	5
Lower back	47	48	42	42
Pelvis	15	16	16	16
Thighs	14	13	16	15
Lower Legs	26	16	16	23
Knees	32	41	32	30
Ankles	42	29	42	30
Feet	33	23	19	21

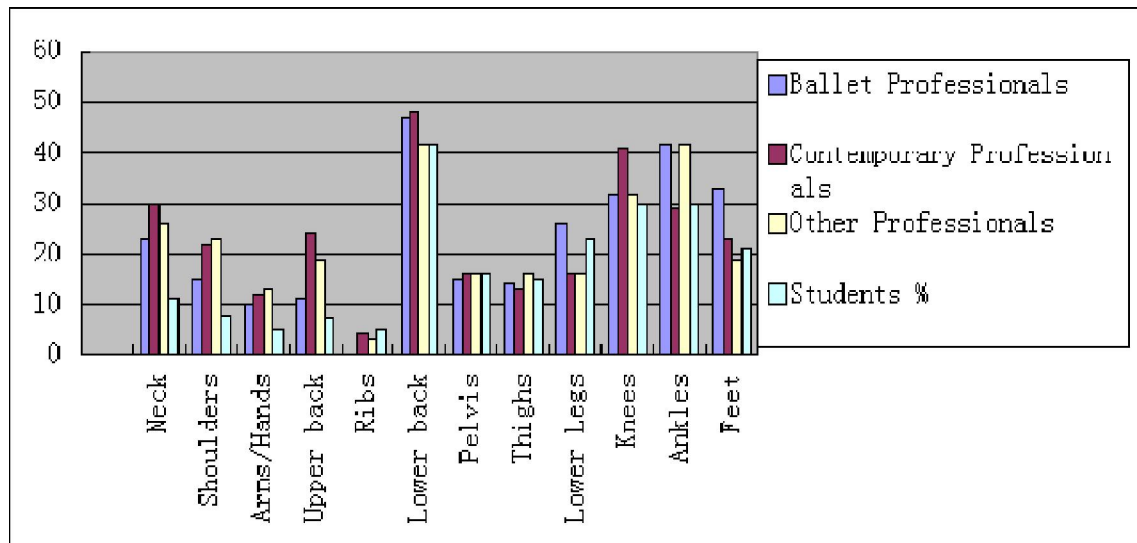


Table 2: Perceived Causes (some dancers)

Cause	Ballet Professionals %	Contemporary Professionals %	Other Professionals %	Students %
Fatigue/ Overwork	57	60	61	52
Unsuitable Floor	47	37	16	1
Repetitive Movements	38	45	23	19
Cold Environment	37	36	29	1
Ignoring Early Warning Signs	23	34	45	34
Insufficient Warm Up	15	25	16	21
Difficult Choreography	14	29	13	9
Partnering Work	12	18	3	9
Psychological	9	15	13	12
Different Choreography	7	6	negligible	1
Inadequate Diet	4	9	13	8
Other	28	22	32	36

Table 3: Treatment received (some dancers)

	Ballet Professionals %	Contemporary Professionals %	Other Professionals %	Students %
Physiotherapy	78	52	39	55
Osteopathy	47	51	42	34
Massage	46	30	26	23
GP	9	16	39	23
Consultant	23	12	10	17
Acupuncture	14	21	16	4
Chiropractic	11	12	13	6
Counselling	negligible	3	3	3
Other	5	7	16	11

Table 5: Bone-length Measurement

Regions	Beginning and end	Method of measurement	Length in cun	Explanation	
Head	Anterior hairline to posterior hairline	Vertical	12	Or 18 cun from ophryon Dazhui(Du 14), minus 3 cun from ophryon to anterior hairline and 3 cun from Dazhui to posterior hairline	
Chest and abdomen	Between two nipples	Horizontal	8	For horizontal measurement of chest and abdomen	
	From xiphisternal synchondrosis to umbilicus	Vertical	8		
	From umbilicus to upper border of pubic symphysis	Vertical	5		
Back	From two medial borders of scapulae	Horizontal	6	For horizontal measurement of waist and back	
Upper limbs	From anterior axillary fold to transverse cubital crease	Vertical	9	Applicable to measurement of both medial and lateral aspects of upper limbs	
	From transverse cubital crease to transverse carpal crease	Vertical	12		
Lower limbs	From femoral trochanter to centre of patella	Vertical	19	For measure-ment of thigh	For measure-ment of anterior lateral and posterior aspects of lower limbs
	From centre of patella to tip of lateral malleolus	Vertical	16	For measure-ment of shank	
	From pubis to upper border of internal epicondyle of femur	Vertical	18	For measure-ment of thigh	For measure-ment of medial aspect of lower limbs
	From lower border of medial condyle of tibia to top of medial malleolus	Vertical	13	For measure-ment of shank	

Table 4: Paying for treatment(some dancers)

	Ballet Professionals %	Contemporary Professionals %	Other Professionals %	Students %
Self	49	72	65	35
NHS	5	11	35	20
Insurance	32	6	negligible	20
Employer /School	27	14	10	26