


Tai Chi

1) enjoy 2) effective. 3) safety

Tai Chi as a therapy



Dr Paul Lam

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Topics

- Why is Tai Chi a good therapy?
- How does it work?
- What is Tai Chi?
- How to prescribe it?
- Let us try it

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Injuries from falls

- Greater than road injury
- Cost 324 million for the year 2000 in NSW
- For > 65 years, largest cause of death and hospitalisation due to injury

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Tai Chi works

Review from BMJ Dec. 2000:

Risk of falls reduces by 47.5% based on research conducted by Atlanta FICSIT study 1996.

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Arthritis

- Affects 1 in 3 adults
- Accounts for 1 in 4 patient visits
- Major cause of registered disability

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Tai Chi works

Randomised studies by the Korean and Taiwan National Universities in 2001 and 2002 have found Tai Chi:

- ↓ Pain & Stiffness
- ↑ Mobility
- ↑ Balance
- ↑ Sense of well-being
- And it is safe.

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Tai Chi for arthritis

> The aims of exercise for arthritis are:

- Flexibility
- Strength
- Fitness

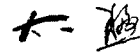
Tai Chi is shown to improve these.

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Ta Chi for Arthritis, High Blood Pressure, Diabetes, 2003 - 2004, Cambridge University Press

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Tai Chi also improves:

- Posture
- Integrate body and mind
- Relaxation, concentration
- Qi power



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What is Tai Chi?

> Originally a famous martial art, but nowadays a very effective exercise for health.

> Styles:

- Chen
- Yang
- Wu
- Sun

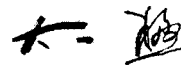


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As an exercise

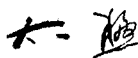
- > High compliance
- > Enjoyable
- > Cost effective
- > Convenience



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A Tai Chi prescription

- > Property
- > Mechanism
- > Side effects



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Property

- > Many types
- > Mostly gentle
- > Traditional forms can be difficult to learn
- > Exercise level - moderate

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Mechanism

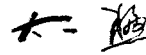
- Exercise – fitness, muscle strength and flexibility
- Mind / body exercise – relaxation and concentration
- Group interaction
- Qi power

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Side effects

- Injury
- Discouragement



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Approaches

1. Understand your patient's needs
2. Examination and record findings
Contraindications and precautions
3. Advice – dosage, class...
4. Encouragement and follow up

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Contraindications

- Unstable angina
- Uncontrolled cardiac failure
- Uncontrolled diabetes
- Uncontrolled hypertension
- Acute infection or fever
- Recent MI
- Arthritis flare

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Precautions

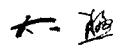
- Warm-up and cool-down exercises
- Body alignment
- Balance
- Do not force any movement: modify movement
- Knee squat

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Dosage

- Why?
- How?



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Follow up

- Review progress
- Check against side effect
- Document benefits –an important motivation factor

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Goal: Tai Chi for health

- Instructor's training
- Making a sophisticated art accessible
- To bridge the gap between health professional and the Tai Chi community.

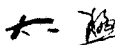
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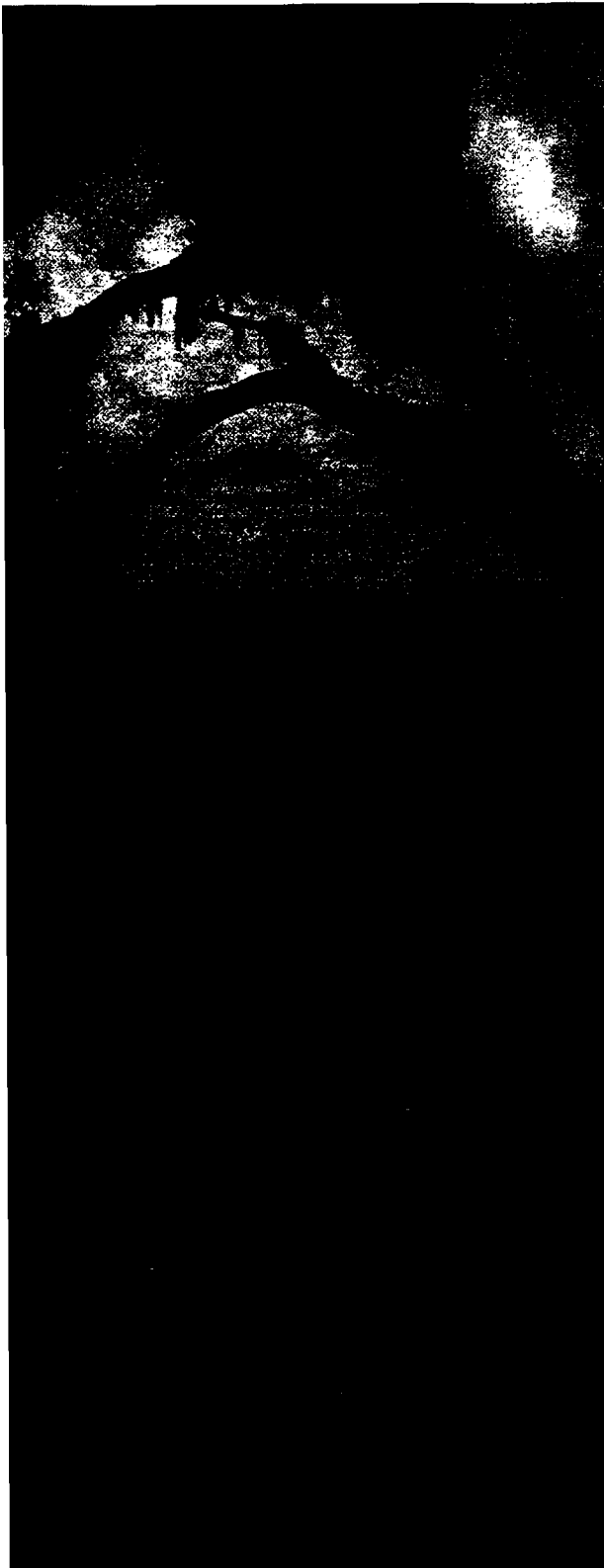
Handouts

- The Tai Chi prescription



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**An exercise with proven
therapeutic benefit is prescribed as
a lifestyle by Dr Paul Lam.**

The tai chi prescription

If exercise came in a pill, it would be a miracle treatment. Study after study shows that exercise can make major improvements in all aspects of health, and tai chi is an ideal exercise. And if it were a pill, before prescribing it we should consider its property/effect, dosage, side effects, and contraindications/precautions.

Tai chi side effects

Even a miracle treatment has side effects. A good understanding of tai chi can help your patients get the maximum benefits without any side effects. Practitioners need to know that tai chi is a form of martial art with numerous forms and styles, each with significant differences in terms of physical exertion, movement and training methods. For example, the original tai chi — *Chen* style — is vigorous and includes jumping, heavy stomping, kicking and punching, so is not suitable for patients with chronic conditions.

The majority of tai chi styles, however, are slow and gentle but protracted and difficult to learn. The most popular, *Yang* style, has 108 forms that could take an average student one to two years to learn. Tai chi can be easy to learn, however, if the focus is health improvement.

Most of the gentle tai chi styles would be classified as 'moderate' exercise by the Heart Foundation of Australia — an activity through which a conversation could be maintained.

Proven benefits

Tai chi works by improving muscular strength, flexibility, and fitness. Muscle strength is important for supporting and protecting joints and is essential for normal physical function. Flexibility exercises enable people to move easier,

Patient information handout : preventing Tai Chi injury

- Do not lock the knees. Keep knees aligned over your feet but slightly bent.
- Do not lean backwards or forwards. Keep your back upright so that the spine is balanced over the pelvis.
- Do not force any movement. Move without effort, as though gently swimming in the air.
- Avoid any abrupt movements. They create tension that will put you off balance or injure the muscles.
- Feel free to modify movements that are uncomfortable. Tai chi should be pleasant and enjoyable, not an endurance contest.
- Include appropriate warm-up and cool-down exercises. This is a must.
- Wear appropriate shoes that are comfortable and suitable for good balance. For people with diabetes, the correct shoes are especially vital.
- Hydration is important. Bring your own water and drink frequently.
- If you feel unbalanced or unstable during tai chi, seek advice from the instructor on how to correct the problem.
- Don't force into a lower stance (squat or bent-knee) beyond your comfort zone. And stand up if one feels too much stress on the knees.

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and facilitate circulation of body fluid and blood, which enhance healing. Fitness is important for overall functioning of the heart, lungs, and muscles. Many studies have shown that tai chi improves all of these components.¹⁻⁴ In addition, tai chi movements emphasise the importance of weight transference, which helps balance and prevents falls.

Tai chi facilitates the flow of *qi*, or innate energy, along energy channels (meridians) of the body to perform many functions to maintain good health. Balancing and maintaining the flow and strength of *qi* is the centre of treatment rationale in traditional Chinese medicine. Tai chi is designed to use conscious thought to drive and use *qi* for martial art purposes. This training is thought to improve mental strength and health through the mind, body and *qi* connection.

Conclusion

Physicians have an important role in recommending, advising, following up and motivating their patients to get exercise such as tai chi offers. The most important thing is to open up a communication channel.

As you become prepared to discuss exercise as a therapy, your patients will be more ready to open up to you. Understand your patient's needs, encourage positive behaviour, document continuing improvements, offer advice to avoid potential problems, and you will soon become proficient in prescribing tai chi. The best approach, however, is perhaps experiential: sample tai chi yourself. It would improve your health, and also set a good example. ▶

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Patient information handout – tai chi exercises

These warm-up exercises incorporate tai chi principles and movements, and are designed to prepare you to practise tai chi by warming up your muscles and helping you focus. They are also useful for tuning up muscles and ligaments to prepare for any other activities.

- Move slowly and gently. Do not force any movement.
- If you have difficulty performing any movement, you may move to a smaller range well within your comfort zone, and at the same time visualise that you are performing the full extent as described.
- Stretch to 70 per cent of your normal range of motion for the first time you perform a movement, and slowly increase the range each subsequent time.

Warm-up

Walk around, clenching and unclenching your hands for 1–2 minutes.

Stretching

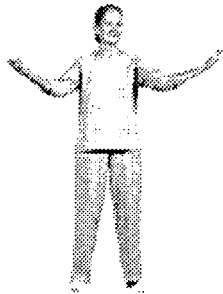
The following are two stretches for each part of the body, starting from the top down. Do each stretch 3–5 times. When appropriate, do the other side. It doesn't matter which side first. Use a chair or the wall for support if you have any difficulty balancing.

Neck

- 1 Bring hands up slowly, breathing in. Bring palms towards your chest and bring chin gently in. Push hands out as you breathe out, and then bring hands down, bending neck slowly.
- 2 Left hand up, right hand down, look at your palm. Move left hand to left, turn head to the left.

Shoulders

- 1 Roll shoulders gently forward and then backward.
- 2 Bring hands up in a curve, breathing in. Press down gently, breathing out.



Hip

- 1 Breathe in and step forward on your left heel, push both hands back to help balance. Step back on your toes as you breathe out, stretching hands forward.
- 2 Turning as little as possible, push both hands to the left side gently as though pushing a wall, and stretch the foot out to the right. Repeat with right foot.



Spine

- 1 Place your hands in front, as though you are carrying a large beach ball. Stretch one hand up, push the other hand down, breathing out when stretched.
- 2 Hands in front as for step 1. With your knees slightly bent, turn your waist gently to one side and then change hands to turn to the other side.



Knees

- 1 Have your fists resting at both sides of the hips. Gently stretch a foot forward. Stretch a foot forward as though you are kicking forward gently, punch out the opposite fist slowly.
- 2 Bend knees and step forward on the heel. Move forward and punch out with opposite fist. Step back and do the other side.



Ankles

- 1 Tap left foot with the heel, then toes.
- 2 Lift up left heel and gently rotate foot clockwise three times and then anticlockwise three times. Repeat with right foot.

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Tai chi Rx protocol	
<p>Therapists are in a strong position to advocate and give advice regarding exercise. These suggested steps are a guide and should be modified with your clinical judgement:</p> <p>1 Take and exercise history. Most patients with chronic conditions will benefit from tai chi. Work out the patient's goal of exercise and how to achieve and maintain it.</p> <p>Compliance studies have shown most people give up exercise after six months. Mind-body exercise, however, such as tai chi, has higher compliance. People will adhere to and exercise that they enjoy.</p> <p>2 Conduct a physical examination. Take special care for patients with heart disease, diabetes, asthma and arthritis. Baseline tests, such as ECG, blood lipid level or Hba1c might be appropriate. For example, if the patient's goal is to improve cholesterol, then a lipid study is helpful. An assessment of mobility and physical function is necessary for people with arthritis.</p> <p>3 Record your discussion on precautions with your patient [preferable, keep a copy for medicolegal reasons] and ask them to give it to his/her tai chi instructor. There is little if any contraindication for tai chi provided the adaptive methods and appropriate care are taken.</p> <p>· Patients with type-1 diabetes should take precaution against hypoglycaemia although in some occasions exercise can precipitate ketoacidosis. Hypoglycaemia is rare for diet controlled patients, and is possible but less likely in type-2 patients who need insulin or sulphonylurea. Exercise usually improves insulin sensitivity and the control of blood glucose levels. The emphasis must be on adjusting the regimen to allow safe participation in tai chi at a level consistent with an individual's goals.⁷</p> <p>Following up and monitoring your patient is essential.</p> <p>· For patient's with asthma, it is worthwhile to check that the tai chi environment is free of any allergens, and that the patient takes appropriate precautions in case of an exercise-induced attack.</p> <p>· In case of an arthritis flare, exercise is important because it enhances the circulation of blood and synovial fluid that facilitate healing. Careful supervision is therefore crucial: an inflamed joint should only be moved gently through its range of motion. Ensure the inflammation is not caused by infection and consult an</p>	<p>exercise specialist if you are not familiar with an exercise prescription for the condition.⁵</p> <p>—Caution Patients with unstable angina and end-stage congestive cardiac failure should not take up tai chi, at least without working closely with their cardiologist.</p> <p>4 Dosage. The recommended dosage of exercise by the Heart Foundation is 30 minutes for most days. Patients should start with a length of time that is comfortable and safe for their conditions. Patients with severe arthritis who may be able to walk for three minutes should start off with three minutes of tai chi, slowly building up the practice time.</p> <p>5 Help your patient find a suitable class. Select an instructor who understands the underlining philosophy of tai chi and has experience in teaching people with your patient's condition. Some tai chi instructors place too much emphasis on the martial arts aspects, and believe there is no gain with no pain, which can be dangerous.</p> <p>Before patients sign up for a particular course or class, advise them to attend at least one meeting and talk to the instructor and students to ascertain its suitability.</p> <p>Arthritis Foundations and some Diabetes Associations throughout Australia have a list of instructors who are trained in specially designed tai chi programs for people with arthritis and diabetes. These programs are safe and easy to learn. The Tai Chi for Arthritis program [www.tai.chi.org.au] has been shown by clinical studies to be effective for relief of pain and stiffness, and improves physical functions for most people with chronic conditions.</p> <p>6 Follow-ups. Assess physical signs for improvement and any side effects. Talk to your patients to find out how they feel since beginning therapy. Re-discuss the precautions. Give motivation and encouragement.</p> <p>The health benefits of tai chi exercise can be gradual. Providing physical evidence of improvement will encourage your patients to continue the therapy. Sometimes patients need several weeks or months to get used to the routine of tai chi exercise and then acquire an almost addictive affinity with it. Your follow-up consultations can be a powerful incentive for them to adhere to tai chi for those first few weeks or months.</p>