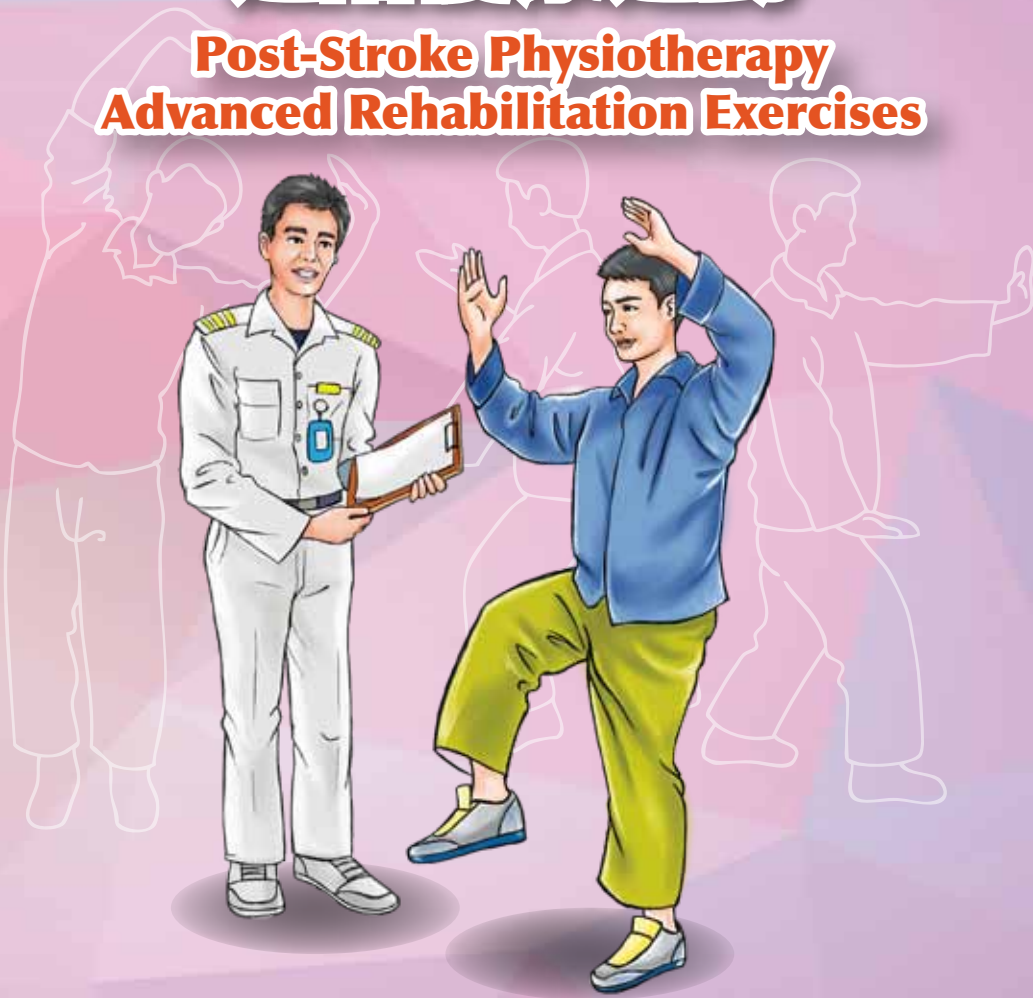


Patient Empowerment Programme, New Territories West Cluster
新界西醫院聯網 病人啓力基金

中風後的物理治療 進階復康運動

Post-Stroke Physiotherapy Advanced Rehabilitation Exercises



博愛醫院
物理治療部製作
produced by
Physiotherapy Department, POH

前言

中風是因腦部供血受阻而發展成的腦功能損傷，根據腦部細胞受損的位置、範圍以及臨床表癥，可分為嚴重中風、中度中風以及輕度中風，而在少於二十四小時內完全康復的，則稱為短暫性腦缺血。不論中風的嚴重程度，及早接受適當的治療，能夠有效防止腦部進一步受損以及出現併發症的機會。

中風後的首六個月是復康的黃金時期，而物理治療在中風復康之路上就擔當著不可或缺的重要角色，幫助中風病者重新學習肢體控制技巧，掌握步行及其他功能技能，提高自理能力，建立康復目標，重投工作及日常社交生活。有研究指出，持續而具目標的復康鍛鍊，能刺激腦部重塑，提升功能。故此，中風復康運動應該持之以恆，每天進行。

此書是特別為輕度中風及中風後康復進度理想的病者而設計，其中介紹一系列進階的物理治療中風復康運動，讓病者能夠持續而有效地自行鍛鍊，繼續改善體能上的不足，提高復康效果。

本書中的康復運動融合了現代物理治療知識與傳統太極拳經中的運動原理。以下會詳述太極拳經裏面所謂的「其根在腳，發於腿、主宰腰胯、形於指掌、節節貫串」的理論應用和太極動作中要求的「中、正、安、舒、輕、慢、圓、勻」的意思。

Preface

Cerebral Vascular Accident (Stroke) means the brain damage caused by deficiency of blood supply to brain cells. According to the extent and location of the brain damage as well as the clinical presentations, stroke can be categorized to severe, moderate and minor stroke. Further brain cells damage or secondary complications are preventable with appropriate early intervention.

Physiotherapy is crucial in stroke rehabilitation, especially in the period of 6 months post-stroke. Stroke patients can regain ambulation and manipulation functions through motor re-learning, so as to increase the independency in daily activities and resume normal social life. In addition, it is scientific-proven that consistent rehabilitation training can continuously stimulate neuro-plasticity.

This pamphlet introduces a series of advanced rehabilitation exercises for patients suffering from minor stroke and patients with good rehabilitation progress after stroke. Daily practice of specific exercises is encouraged in order to optimize functional ability.

The following exercises integrate physiotherapy to traditional Tai Chi Chuan (TCC) with regard to sports science. TCC emphasizes on body alignment, correct posture, proper muscle activation and, most importantly, body-mindfulness of different TCC forms.

注意事項 Points to note

靜態要求 Static requirement:

- 中 — 置中體位 Neutral posture
- 正 — 正確姿勢 Accurate position
- 安 — 安穩舒適 Stable and comfortable position
- 舒 — 舒展放鬆 Relax and elongation

動態要求 Dynamic requirement:

- 輕 — 動作輕柔 Gentle movement
- 慢 — 緩慢速度 Slow movement
- 圓 — 圓弧動作 Circular movement
- 勻 — 均勻發力 Smooth movement

其根在腳 —

所有動作都是根基於腳部支撐面。
All movement is based on the foot support.

發於腿 —

發力需始於腿部。
Force is generated at lower limbs.

主宰腰胯 —

發力方向由腰胯主導。
The force direction is controlled by waist.

形於指掌，節節貫串 —

所發之力要貫穿各個關節而抵達於指掌。
The force permeates through each involved joint in correct sequence towards hand.

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運動姿勢基礎

Fundamental Postural Control

立身中正


Righting Posture



坐 Sitting



站 Standing



做法：雙腳張開同肩闊度，頭頂天腳立地，雙肩下沉，挺胸收腹，至有上下對拉拔長之感，維持10秒，重覆5次。

Method: Stand with feet apart as shoulder width. Elongate the spine, depress shoulders, expand chest and posteriorly tilt the pelvis. Hold the posture for 10 seconds and then slowly relax, repeat 5 times.

功用：改善姿勢，增強核心肌力，預防痛症；此乃任何運動的基礎。

Effect: To correct posture, improve core muscle strength and prevent musculoskeletal pain. This is fundamental for all exercises.



仰卧 Supine lying

進階中風復康運動

Advanced Rehabilitation Exercises for Stroke

Exercises in Supine Lying

雙腳拱橋

Bridging exercise with both legs support

做法：平躺，雙膝屈曲，雙足及雙膝分開至跟盤骨一樣闊度，收緊腰腹肌肉及臀部肌肉，下盤向上提升，維持10秒，重覆5次。

Method: Lying flat and bend knees. Keep feet and knees apart as pelvic width. Contract abdominal core muscles and gluteus muscles meanwhile lift buttock up. Hold for 10 seconds, repeat 5 times.



進階練習
Progress

單腳拱橋

Bridging exercise with single leg support

做法：平躺，雙膝屈曲，雙足及雙膝分開至跟盤骨一樣闊度，腿舉高至45度角，收緊腰腹肌肉及臀部肌肉，保持盤骨平衡，下盤向上提升，維持10秒，重覆5次。

Method: Lying flat and bend knees. Keep feet and knees apart as pelvic width. Raise one leg to 45 degrees inclination with bed. Contract core muscles and gluteus muscles meanwhile lift buttock up. Hold for 10 seconds, repeat 5 times.

功用：增強核心肌力，腰腹肌肉及臀部肌肉力量

Effect: To increase strength of core muscles, abdominal muscles, low back muscles and gluteus muscles.



交叉屈膝

Alternate Knees Bending

做法：仰臥收腹，雙腿輕微張開，慢慢屈曲一膝至髖關節之上，形成90-90度角，同時足踝曲起；另一腿則保持伸直。兩腿交叉重覆動作10次，並可嘗試增加速度。

Method: Lying flat, legs slightly apart, bend one knee to the level of vertically above hip joint and make 90-90 degree, with toes up. Repeat with alternate legs for 10 times. This exercise can be progressed through increasing speed of motion.

功效：改善下肢肌張力，協調；亦能強化腹肌

Effect: To improve strength of abdominal muscles and lower limbs muscles and also train lower limbs coordination.



仰臥式腰盤運動

Lumbo-Pelvic Exercises in Supine Lying

做法：平躺，雙膝屈曲，雙足及雙膝分開至跟盤骨一樣闊度，收緊腰腹肌肉，前後搖動盤骨，重覆10次。

Method: Lying flat and bend knees. Keep feet and knees apart as pelvis width. Contract abdominal core muscles and move the pelvis anteriorly and posteriorly (fro and back). Repeat 10 times.



進階練習
Progress


坐式/站立式/四肢著地式腰盤運動
Lumbo-Pelvic Exercises in Sitting/
Standing/Four-point Kneeling

Exercises in Four-point Kneeling

四肢著地式腰盤運動

Lumbo-Pelvic Exercises in Four-point Kneeling





做法：雙手與雙膝著地，且雙手張開與肩同寬撐在地上，雙膝打開與盤骨同寬。進行搖動盤骨運動，重覆10次。

Method: Kneel on knees and supported by upper limbs, hands and knees apart as shoulder and pelvis width respectively. Contract abdominal core muscles and move the pelvis anteriorly and posteriorly (fro and back). Repeat 10 times.

功用：增加腰盤靈活性，強化核心肌群，幫助改善步態

Effect: To increase the mobility of lumbosacral joint and strengthen core muscles, in order to refine gait pattern

後提腿

Kicking Backward Exercise

做法：四肢著地式，收緊腰腹肌肉，單腿在向後伸直，抬到臀部高度，維持平衡，保持10秒，然後將腿放下，回到原位。左右兩腿各做5次。

Method: In four-point kneeling position and hold core muscles. Kick one leg backward up to hip level. Maintain the posture for 10 seconds and return to starting position. Repeat with alternate legs for 5 times.



進階練習
Progress

交叉舉手提腿

Alternate Limbs Raising Exercises

做法：四肢著地式，收緊腰腹肌肉，單腿在向後伸直，抬到臀部高度，對側上肢向前舉起至背部水平，維持平衡，保持10秒，然後回到原位。左右對側各做5次。

Method: In four-point kneeling position and hold core muscles. Kick one leg backward up to hip level meanwhile the arm of contralateral side raise to shoulder level. Maintain the posture for 10 seconds and return to starting position. Repeat alternately for 5 times.

功用：強化腰背肌肉、核心肌群及臀部肌肉，有助改善平衡力

Effect: To improve the muscle strength of back muscles, core muscles and gluteus muscles, in order to improve balance ability



Exercises in Standing

伸手拔背

Forward Reaching with Back Stretch

做法：保持正中姿勢，雙肩下沉，手心向天，雙手向前提高至肩膊水平；由肩胛開始，肩膊、手肘、手腕至手指，向前發力，至有無限向前延伸之感，維持10秒，重覆5次。

Method: Keep righting posture in standing, depress shoulders and both hands facing upward. Elevate both arms forward and upward to shoulder level. Elongate the arms from shoulder girdles to fingers joints. Maintain the posture for 10 seconds. Repeat 5 times.

功用：加強上背及肩胛帶肌群的肌力

Effect: To strengthen upper back and shoulder girdle muscles



平開展翅

Sideway Arm Elevation with Back Stretch

做法：保持正中姿勢，雙肩下沉，手心向天，雙手向兩側提高至肩膊水平；由肩胛開始，肩膊、手肘、手腕至手指，向兩端發力，至有無限向前延伸之感，維持10秒，重覆5次。

Method: Keep righting posture in standing, depress shoulders and both hands facing upward. Elevate both arms side-way and upward to shoulder level. Elongate the arms from shoulder girdles to fingers joints. Maintain the posture for 10 seconds. Repeat 5 times.

功用：加強上背及肩胛帶肌群的肌力

Effect: To strengthen upper back and shoulder girdle muscles



左(右)彎弓

Trunk Side Flexion with Elongation

做法：雙手手心向天，雙手指尖相對，圓拱上托；慢慢彎身向左側，保持脊骨延伸，維持10秒；兩側各重覆5次。

Method: Stand with righting posture with both hands facing upward. Slowly side-flex your trunk with spinal elongation. Maintain 10 seconds at limit of the range. Repeat 5 times for both sides.

功用：強化及延伸核心肌群，增加腰側肌肉柔軟度；伸展膽經，提升人體的吸收能力

Effect: To strengthen and stretch core muscles of back. In Traditional Chinese Medicine, the gall bladder meridian is stretched, which can improve absorption ability in gastro-intestinal system.



左(右)正旋

Trunk Rotation with Elongation

做法：雙手手心向天，雙手指尖相對，圓拱上托；保持脊骨中正延伸，下肢不動，腰以上向左旋轉，維持10秒；兩方各重覆5次。

Method: Stand with righting posture with both hands facing upward. Keep both legs fixed and spine in elongated; then rotate your trunk to one side. Maintain 10 seconds at limit of the range. Repeat 5 times for both sides.

功用：強化及延伸核心肌群，增加頸椎、胸椎關節及腰盤關節靈活性

Effect: To strengthen and stretch core muscles of back. To increase the mobility of cervical, thoracic and lumbosacral joints.



金雞獨立

Single Leg Standing Exercise

做法：中正姿勢，雙腿輕微張開，將重心移向一腿，頭頂天腳立地有對拉之感，髖部水平，維持10秒。兩腿交替重覆動作5次。

Method: Keep righting posture in standing. Weight shift to one leg meanwhile elongate the spine. Slowly bend another knee to hip joint level and hold 10 seconds. Repeat alternately for 5 times.





進階練習
Progress

動態式金雞獨立

Single Leg Standing Exercise with Dynamic Motion

做法：中正姿勢，將重心移向一腿，頭頂天腳立地有對拉之感，慢慢起另一腿向外打圈旋轉，維持10秒。兩腿交替重覆動作5次。熟練後可加上肢動作。

Method: Keep righting posture in standing. Weight shift to one leg meanwhile elongate the spine. Slowly bend another knee to hip joint level and circulate. Repeat alternately for 5 times.

功效：鍛鍊核心肌群及下肢肌力，從而改善平衡力

Effect: To strengthen core muscles and lower limbs muscles, in order to improve balance



站立式交叉屈膝 High Stepping Exercise

做法：中正姿勢，雙腿輕微張開，慢慢屈曲一膝至髁關節之上，形成90-90度角，同時足踝曲起；另一腿則保持伸直。兩腿交叉重覆動作10次，如原地踏步動作，熟練後可嘗試增加速度。

Method: Keep righting posture in standing with legs slightly apart. Slowly bend one knee to hip joint level to make 90-90 degree with toes up. Repeat the movement with alternate legs for 10 times and progress through increasing speed of motion.

功效：鍛鍊下肢協調，改善步態

Effect: To improve lower limbs coordination, so as to improve gait pattern



太極起勢

Starting Movement

做法：中正姿勢，雙腿輕微張開，向前提手至肩高，再慢慢按掌屈膝紮馬。重覆動作10次。

Method: Keep righting posture in standing with legs slightly apart. Raise both arms to shoulder level with palms facing down. Slowly press arms down to waist level meanwhile bend knees to squat. Repeat the movement for 10 times.



功效：鍛鍊下肢關節感應及肌力

Effect: To improve lower limb joints proprioception and muscle strength

十字手

Hands- Crossing Exercise



做法：中正姿勢，雙腿輕微張開，慢慢張開雙臂向外劃圓，然後雙手再次於頸部水平十字交疊。重覆動作10次。

Method: Keep righting posture in standing with legs slightly apart. Slowly elevate and circulate the arms sideway and cross at the throat level.

功效：鍛鍊上肢控制協調

Effect: To improve upper limbs coordination



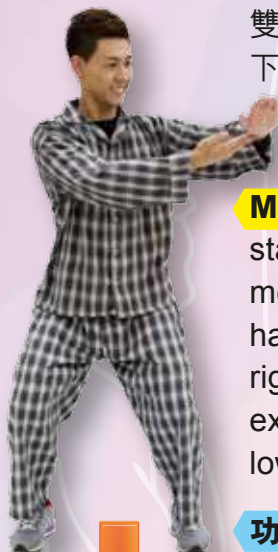
熟練後可嘗試在收掌時與屈膝紮馬動作同做。

This exercise can be progressed through combining depressing arms with semi-squatting.

雲手

Swirl Arms

做法：中正姿勢，屈膝紮馬。提起左手，右手下降，將雙手帶向左邊；之後左手放下，右手提起，將雙手移向右邊。重覆動作10次。熟練後可嘗試與下肢重心轉移同做。



Method: Keep semi-squatting in righting posture in standing. Raise left hand and depress right hand meanwhile trunk rotate to left side; then depress left hand and raise right hand meanwhile trunk rotate to right side. Repeat the movement for 10 times. This exercise can be progressed through combining with lower limbs sideway weight shifting.

功效：鍛鍊上肢控制及協調

Effect: To improve upper limbs active control and coordination.



弓坐步進退

Fro and Back Weight Shifting



做法：立身中正，沉肩墜肘，後坐步，重心在於後腿，前腳尖勾起；慢慢將重心前移至前腿；前後重心轉移重覆動作10次。

Method: Keep righting posture with weight shifting to the back leg meanwhile toes up of the front leg and then slowly weight shift to the front leg. Repeat the movement for 10 times.



功效：幫助鍛鍊步行時的重心轉移，強化核心肌群及下肢肌力，改善平衡及步態

Effect: To improve front and back weight shifting as in walking. To strengthen core muscles and lower limbs muscles, so as to improve balance and gait pattern.

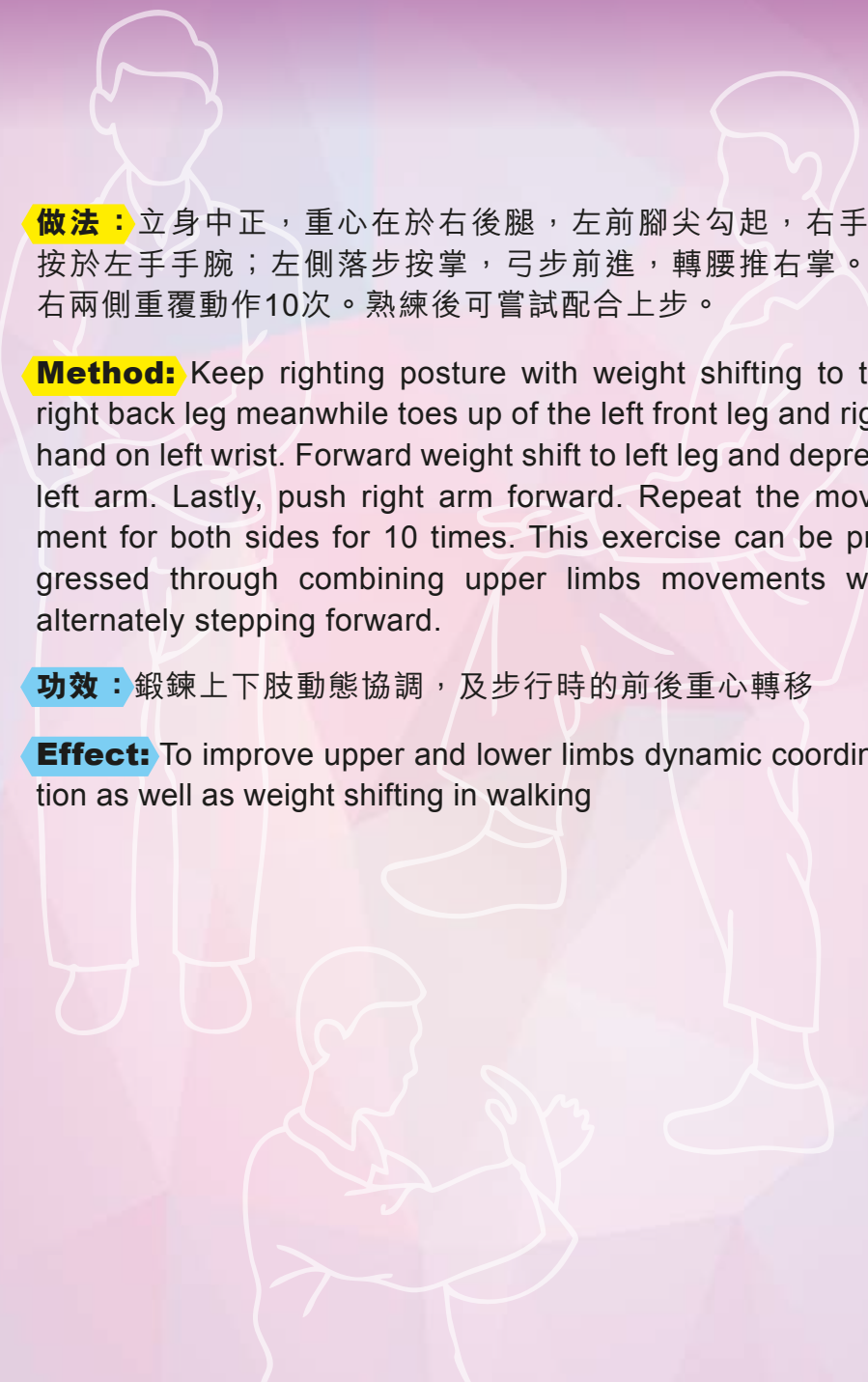
熟練後可嘗試與上肢動作同做，例如抱空氣球動作。

This exercise can be progressed through combining with upper limbs exercise, such as holding a virtual ball.

摟膝拗步

Sweep Knee and Push





做法：立身中正，重心在於右後腿，左前腳尖勾起，右手輕按於左手手腕；左側落步按掌，弓步前進，轉腰推右掌。左右兩側重覆動作10次。熟練後可嘗試配合上步。

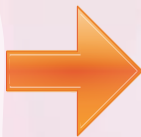
Method: Keep righting posture with weight shifting to the right back leg meanwhile toes up of the left front leg and right hand on left wrist. Forward weight shift to left leg and depress left arm. Lastly, push right arm forward. Repeat the movement for both sides for 10 times. This exercise can be progressed through combining upper limbs movements with alternately stepping forward.


功效：鍛鍊上下肢動態協調，及步行時的前後重心轉移

Effect: To improve upper and lower limbs dynamic coordination as well as weight shifting in walking

單鞭

Single Whip





做法：立身中正，雙腳張開，穩紮下盤，左勾手，向左轉腰，右手輕放於左手手腕；右手開掌轉腰向右，左手輕放於右手手腕，左右重覆動作5次。熟練後可嘗試配合左右側移。


Method: Keep righting posture in standing with legs apart. Stabilize lower limbs. Turn left palm facing down and “form a beak”; rotate your trunk to left side and right hand place on left wrist. Move right hand levelly to the right side meanwhile rotate your trunk to the right, left hand place on right wrist. Repeat the movement for 5 times. This exercise can be progressed through combining sideway shifting of lower limbs.

功效：鍛鍊上下肢動態協調及上肢小關節活動

Effect: To improve upper and lower limbs coordination and fine motor control

向前蹬腿
Kicking Forward



A white line-art illustration of a person in a semi-squatting position. Their arms are raised and crossed at chest level, with the right hand reaching forward. The right leg is kicked forward, and the right knee is raised. The person is standing on a light blue rectangular mat. The background is a soft, light purple gradient.

做法：立身中正，屈膝紮馬，提手至胸前交叉，同時提起右膝；張開雙手，右手向前，同時蹬直右腿，維持5至10秒。左右重覆動作5次。

Method: Keep semi-squatting in righting posture. Raise arms and cross at chest level meanwhile raise right knee. Open arms with right hand reaching forward meanwhile kick right leg forward. Hold for 5 to 10 seconds. Repeat alternately for 5 times.

功效：鍛鍊核心肌群及下肢肌力，改善平衡力。鍛鍊上下肢協調能力。

Effect: To strengthen core muscles and lower limbs muscles to improve balance. To improve upper and lower limbs coordination.



鳴謝：新界西醫院聯網 病人啟力基金

ACKNOWLEDGEMENT :

Patient Empowerment Programme, New Territories West Cluster

2016年2月初版

February, 2016 First Publish