強化四頭肌 Strengthen Quadriceps Muscles

坐著,手持橡筋帶並繞過腳掌,慢慢把腳伸直。 Sit, hold a resistance band around the foot, and slowly straighten the leg.



注意事項 Precautions:

- 在手持重物時,要密切留意手部是否有不適症狀。
 Pay close attention to any discomfort in the hands when holding weights.
- 運動時要保持呼吸暢順,先吸氣,用力時呼氣。
 Maintain smooth breathing, inhale before exerting force, and exhale during exertion.

伸展運動 Stretching Exercise

頻率 Frequency: 每天 Daily

強度 Intensity:

感受到肌肉有輕微拉扯的感覺,而不會感到疼痛。

Feel a gentle stretch in the muscles without pain.

時間 Duration:

每一個動作,在輕微拉扯的位置上保持10-30秒。 每組肌肉的伸展動作可重複2-4次。

Hold each stretch for 10-30 seconds in a comfortable position. Repeat each stretch 2-4 times per muscle group.

類型:針對上下肢肌肉

Type: Focus on upper and lower limb muscles.

伸展胸部肌肉

Stretch Chest Muscle (Pectoralis Major)

- 雙手在身後緊握。
 Hold hands together behind back.
- 保持腰部挺直。
 Keep trunk straight.
- 雙手向上提起。Move arms up slowly



伸展大腿前方肌肉 Stretch Quadriceps Muscles

- 一隻手扶在椅上。
 One hand holds on chair.
- 另外一隻手握著足踝位置。
 Another hand holds the ankle.
- 然後用手慢慢屈曲膝關節。
 Then bend the knee slowly.



伸展小腿肌肉 Stretch Calf Muscles

- 雙手握著毛巾,如圖。
 Both hands hold the towel as shown in the picture.
- 保持膝部伸直。Keep knee straight.
- 雙手用毛巾把腳掌拉前。
 Pull the ankle towards you with the towel.



伸展大腿後方肌肉 Stretch Hamstrings Muscles

- 雙手握著毛巾,如圖。
 Both hands hold the towel as shown in the picture.
- 保持身軀及膝部伸直。
 Keep trunk and knee straight.
- 身軀慢慢向前移。
 Lean forward slowly.



伸展前臂肌肉 Stretch forearm muscles

- 伸直手肘,手背向後屈。
 Straighten elbow, pull your hand back.
- 伸直手肘,手掌向內屈。
 Straighten elbow, pull your palm down.



注意事項 Precaution:

伸展動作要穩定,切勿做出動彈的動作。 Perform stretching movements smoothly without bouncing.

注意事項 Precautions:

- 留意癌症治療所引致的疲勞。 Be aware of cancer-related fatigue.
- 癌細胞擴散至骨骼的患者,骨折的風險會增加。
 Be aware of the increased risk of bone fractures in patients with bone metastages.
- 在癌症治療期間,患者對運動的耐受性,會經常轉變。因此, FITT原則(運動頻率、強度、時間及類型)的運動處方原則需 因病人的情況而作出滴當的調整。
- Exercise tolerance of patients may be highly variable during active treatment. Modification of FITT principle (Frequency, Intensity, Time, and Type) to a level that is better tolerated should be considered.
- 如果感到不尋常的症狀或情況,如發燒、頭暈、噁心、極度疲勞、貧血症狀、視力模糊、胸口疼痛或四肢無力,應停止練習。
 Do not exercise patients who are experiencing fever, dizziness, nausea, extreme fatigue, anemia, blurred vision, chest pain, or weakness in the limbs.
- 如果因為神經病變影響平衡力,應考慮替代的帶氧運動(例如固定單車或帶有安全扶手的跑步機)
- If neuropathy affects balance, consider alternative aerobic exercises (e.g., stationary cycling or treadmills with safety handrails).
- 根據您的身體狀況和能力水平,從輕度運動開始,逐漸增加 運動量、強度和時間,給予身體適應和恢復的時間。
- Start with light exercises based on your physical condition and ability, and gradually increase exercise frequency, intensity, and duration to allow time for adaptation and recovery.
- 進行運動時,如過份用力、姿勢錯誤,速度太快或過量活動, 有機會導致肌肉拉傷,嚴重可引致骨折,脱臼或摔倒,請遵從物理治療師的指示進行運動。

There is a risk of muscle strain / fracture / dislocation / fall if movement is too vigorous or position is improper. Please follow the instructions of your physiotherapist.

鳴謝

新界西醫院聯網 病人啟力基金 醫院管理局 版權所有 翻印必究 新界西醫院聯網病人資源中心



化原引起的 週邊神經病變 (CIPN)之運動簡介

Exercise for Chemotherapy-Induced Peripheral Neuropathy









引言 INTRODUCTION

化療引起的周邊神經病變 (CIPN) 是化療中最常見的副作用之一。其主要症狀包括麻木、疼痛、感覺異常、感覺遲鈍、感覺過敏、肌肉痙攣、無力、平衡力減弱以及步態不穩定等,而長期的損害會對患者的生活質素產生負面影響。

Chemotherapy-Induced Peripheral Neuropathy (CIPN) is one of the most common complications of chemotherapy. Key symptoms include numbness, pain, abnormal sensations, sensory loss, hypersensitivity, muscle spasms, weakness, impaired balance control, and unstable gait. Long-term impairment can negatively impact the patient's quality of life.

導致CIPN的化療藥物 Chemotherapy Drugs Leading to CIPN:

鉑金類藥物(Platinum compounds),如順鉑 (Cisplatin)、草酸鉑

(Oxaliplatin),紫杉醇類

藥物(Taxane) 如太平洋紫杉醇(Paclitaxel) 和歐洲紫杉醇(Docetaxel), 長春新鹼(Vincristine)、 長春鹼(Vinblastine)等。

運動對CIPN和癌症患者的益處Benefits of Exercise for CIPN and Cancer Patients:

運動不但有助改善CIPN症狀,還能提升心肺功能和增強身體機能,並有助減低疲勞感覺,改善焦慮和抑鬱症狀,改善生活質素。Exercise helps improve CIPN symptoms, enhances cardiopulmonary and physical function, reduces fatigue, alleviates anxiety and depressive symptoms, and improves quality of life.

運動計劃 Exercise Program:

運動計劃包括帶氧運動、肌肉強化運動和伸展運動,詳情如下:

The exercise program includes aerobic exercises, muscle strengthening exercises and stretching exercises, as detailed below:

帶氧運動 Aerobic Exercise

頻率 Frequency

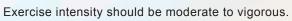
一星期3-5 日。 3-5 days per week.

強度 Intensity

運動強度應為中等至劇烈。

中等強度運動:「辛苦感覺程度指標|為12-13之間。

劇烈運動:「辛苦感覺程度 指標|為14-17之間。



Moderate-intensity: A "Rate of Perceived Exertion (RPE)" between 12-13.

Vigorous-intensity: RPE between 14-17.

辛苦感覺程度指標 Rate of Perceived Exertion (RPE)

Nate of Ferceived Exertion (INFE)	
6	
7	非常輕微 (甚至微不足道)Extremely light
8	
9	很輕微 Very light
10	
11	┃ 頗輕微 Light
12	2
- 13	3 有點辛苦 Somewhat hard
14	4
1	5 辛苦 Hard (heavy)
16	6
17	7 很辛苦 Very hard
18	3
19	異常辛苦 Extremely hard
20	1

時間 Duration

一星期平均150分鐘的中等強度運動,或一星期平均75分鐘的劇烈運動。

An average of 150 minutes of moderate-intensity exercise per week, or 75 minutes of vigorous-intensity exercise per week.

類型 Type

步行、慢跑、踩單車或游泳等等。 Walking, jogging, cycling, or swimming.

注意事項 Precaution:

身體機能不佳的患者應從簡單運動開始,如時間短及強度低的運動。例如步行10分鐘,每天3次。

Patients with poor physical function should start with simple exercises, such as short-duration and low-intensity exercises. For example, walking for 10 minutes, three times a day.

肌肉強化運動 Muscle Strengthening Exercise

頻率 Frequency

每星期2-3日。2-3 days per week.

強度 Intensity

1 Repetition Maximum (RM)的60 - 70%重量。

1 RM:在單次舉重裡,個人能舉起的最大重量。

60-70% of 1 Repetition Maximum (RM).

1 RM: The maximum weight an individual can lift in a single repetition.

時間 Duration

1組最少8-12下。At least 8-12 repetitions per set.

類型 Type

重量訓練 Resistance training.

強化二頭肌

Strengthen Biceps Muscles

坐著,手持橡筋帶並繞過大 腿,用力屈曲手肘。

Sit, hold a resistance band around the thighs, and bend the elbows.



強化肩部肌肉 Strengthen Shoulder Muscles

坐著,手持已固定的橡筋帶慢慢伸直手肘。 Sit, hold a fixed resistance band, and slowly straighten the elbow.



強化髖關節肌肉 Strengthen Hip Muscles

1 橡筋帶束於腳踝上,仰臥,慢慢提腿向上。

With a resistance band around the ankles, lie on your back and slowly lift your leg upward.



2 橡筋帶束於腳踝上,側臥,慢慢提腿向上。

Lie on your side with a resistance band around the ankles, and slowly lift your leg upward.

