

Brock-Niagara Centre for Health & Well-Being

Dear Doctor _____:

The Power Cord exercise program is a wheelchair accessible exercise program for people with neuromuscular disability. This program offers many types of exercise modalities including:

- Wheelchair accessible resistance training
- Wheelchair accessible aerobic exercise
- Body-weight supported treadmill training
- Various forms of functional electrically stimulated (FES) exercise including:
 - FES leg-cycling
 - Hybrid FES-arm/leg cycling
 - FES ambulation training

Most of this exercise is performed while seated, however, some modalities require us to hoist the individual to the standing position. Each participant will receive his or her own personalized exercise program, which will utilize some or all of these modalities.

Your patient, _____ wishes to join the Power Cord Exercise Program. Prior to joining however, all potential participants must obtain medical approval from a Physician. As such, we would appreciate your assistance in determining the health status of your patient and his or her readiness for our exercise program.

Please note that there are **absolute contraindications** to exercise which will preclude the use of certain modalities, and there are **relative contraindications** that do not necessarily preclude exercise, but require awareness and special consideration.

The **absolute contraindications** that pertain to FES of the lower limbs are:

- The use of a cardiac pacemaker
- The presence of an unhealed fracture in the lower limbs
- Pregnancy

The **absolute contraindications** that pertain to FES of the upper limbs are:

- The use of a cardiac pacemaker
- The presence of an unhealed fracture in the upper limbs
- Pregnancy
- A Grade 3 tear of either rotator cuff
- An inability to keep the humeral head in the glenohumeral joint, with or without electrically evoked contractions of the shoulder

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The following are the **relative contraindications** to exercise. Again, these conditions do not necessarily preclude exercise, but we do like to be informed about their presence as we may need to modify, limit or omit certain exercises.

Relative contraindications to exercise:

- Osteoporosis and/or a history of fractures
- Orthostatic hypotension
- A susceptibility to uncontrolled autonomic dysreflexia
- Suspected or diagnosed heart problems or epilepsy
- Chronic musculoskeletal or neuropathic pain, especially if the latter manifests as hyperalgesia in certain dermatomes
- An existing pressure sore, or a history of pressure sores
- Recently (>3 months) implanted plates, pins, screws and other hardware
- Implanted stimulators such as vagus, phrenic, cardiac, cochlear or diaphragmatic stimulators
- Substance abuse
- A cancerous lesion (electrical stimulation should not be applied over, or in proximity to a cancerous lesion)
- Severe muscle spasticity
- A history of hip or knee dislocation/subluxation
- Respiratory complications

In addition to the contraindications listed above, there are general risks associated with any exercise program. Therefore, your patient will be exposed to the following inherent risks, including but not limited to:

- all manner of injury from physical exertion and cardiovascular output, including dizziness, shortness of breath, chest discomfort, muscle cramps, sprains and/or strains;
- all manner of injury resulting from misuse, non-use and/or failure of any equipment;
- all manner of injury from exerting and/or stretching various muscle groups;
- all manner of injury arising from tripping and/or falling and impacting against the floor surface, walls, apparatus/equipment, the ground, other participants, or trainers;
- all manner of injury arising from falls during balance activities;
- abnormal blood pressure, lightheadedness or fainting, and irregular heart beat and in rare cases, HEART ATTACK, CARDIAC ARREST AND EVEN DEATH.

Every effort will be made to minimize the risks during your patient's participation in the Power Cord Program. Staff will be trained in basic cardiopulmonary resuscitation (CPR), first aid and will have access to an Automated External Defibrillator.

Please check the appropriate circle box to indicate your opinion on the medical readiness for exercise for _____. If you feel this program is inappropriate for your patient at this time, please let them know verbally.

Exercise with no restrictions:



Please check the circle if your patient is able to begin exercise in the Power Cord program with no restrictions.

Exercise with restrictions:



If you feel that your patient is able to exercise with us, but you would like to place certain restrictions on his/her program, please check this circle and indicate the restrictions in the area below.

Diagnostic Testing:



If you feel that your patient should undergo any diagnostic testing before he/she begins exercise with the Power Cord Program, please check this circle and indicate the desired tests below.

Test(s) to be performed:

Exercise restrictions once we receive test results from your office:

Signed: Dr. _____

Date: _____

Thank you for your involvement with the Brock-Niagara Centre for Health and Well-Being. Please feel free to contact me for any further information that you require.

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