

## Exercise Physiology review for Mr Tim Brennan

**1/12/2023**

**Re: Mr Timothy Brennan    DOB: 18/01/1955**

**Address: 89 Forest reefs road, Milthorpe, NSW,**

### **Overview**

Mr Brennan lives in the small township of Millthorpe NSW, with this sister Trish who has become his carer and receives the Carer Payment due to his reduced functional capacity. They have limited transport to supports due to Tims inability to drive. Mr Brennan suffers from ankylosing spondylitis which is an inflammatory condition that overtime causes fusing of the vertebrae and associated pain, stiffness and reduced mobility in the neck, pelvis and spine. He has multiple chronic health conditions that have significantly affected his functional capacity and ability to complete activities of daily living. He been on the Disability Support Pension since 2016. In May 2022, he suffered an adverse reaction following a vaccination and flu, causing a coronary event, along with a sub massive pulmonary embolism and deep vein thrombosis. Tim suffers from disrupted sleep due to significant cramping pain, obstructive sleep apnoea and dyspnoea which is compounding levels of fatigue during the day. He also experiences pain during the day, both after activity and when resting. These conditions cause breathlessness and dyspnoea on exertion and heaviness - swelling, in his lower limbs reducing his walking capacity.

### **Functional capacity**

Due to the nature of Mr Brennans complex multiple health conditions, he describes having pain each day however the severity can change. Mr Brennan currently walks on average 2 times per week to the local shopping centre and can only able to do so on a "good day", however, still manages to walk at a very slow pace with multiple rests with the assistance of his sister for support. On "bad days" Mr Brennan is house bound and can only walk short distances with assistance. His sister and carer Trish completes all domestic, household and activities of daily living (ADL) duties including cooking, cleaning, washing and assists Tim with ADL including dressing and getting ready for the shower. They employ supports whom come in and assist to complete the gardening and mowing, and grocery/shopping is completed online and delivered.

### **Exercise testing/ physical capacity**

Testing:	5/10/2023	28/11/23
Tandem walk	2 corrections	0
6min walk distance	248m Exhibited wide stance, lateral sway, and swinging of left leg. Reported right leg fatigue and pain after most likely due to compensatory	296m Feet pain 6-7/10 5/10 ankle/knee pain Reduced lateral sway, decreased feelings of heavy

	movement patterns, pain in ball of feet.	legs, increased heel strike during gait ( reduced risk of tripping), reduced stance width
Sit to stand (30sec)	5- required hand on leg & table for support to stand up 6/10 pain ( in hips) 5/10 rating of perceived exertion (RPE)	7 – able to stand without support 4/10 in hips 5/10 RPE
Bicep curl (30sec) 5kg	20	20
Total seconds balancing left and right	14 sec bilaterally	Right leg 36 Left leg 17
Other	<ul style="list-style-type: none"> <li>Severely limited neck range of motion (ROM)</li> <li>Reduced left leg (ROM) 70 degrees</li> <li>After long bouts of sitting pain &amp; stiffness is aggravated</li> </ul>	

### **Results/comments after exercise intervention**

Mr Brennan was referred to me by his GP Dr Peta Harrison under as part of his chronic disease management plan for 5 exercise physiology sessions over the past 2 months. Over this period of time I have prescribed Mr Brennan targeted mobility, strength & balance exercises that can be adjusted depending on his level of fatigue or pain and are predominantly completed in a seated or laying position or with external assistance to ensure safety and reduce risk. He has been completing prescribed exercises most days of the week in addition to 3x5 minute bouts of low intensity cycling on the recently purchased recumbent exercise bike (supplied through his aged care package). As indicated by the results in the table above he has improved his lower body strength, increased walking capacity and tolerance (through increased strength & endurance in lower limbs, mobility, and gait efficiency) and improved his static balance ability all of which can significantly contribute to his falls prevention and functional capacity.

Despite the gains that have been made Mr Brennan still regularly experiences symptoms of aching pain, leg cramps, swelling, itchiness, heaviness in legs, sleep interruption, chronic fatigue, and despondence. More recently, he has had difficult and laboured breathing at night; light-headedness when in the garden; at times exercise intolerance, (fatigue, heaviness in the limbs, shortness of breath) and an intolerance to too much sun (iritis flare up). Due to the nature of some of his health conditions they fluctuate in severity making progress not straight a forward linear trajectory. Regardless exercise intervention serves as a management tool to slow down further progression/deterioration as a result of his health conditions.

### **Goals**

Mr Brennan's overarching goal is to manage his pain and reduce the impact of his conditions on his quality of life.

### **Recommendations**

Exercise physiology services are recommended to develop and implement a tailored exercise prescription for Timothy including a bank of exercises that he can implement and accommodate for “good vs bad days”. Supervised sessions will be helpful initially and at regular intervals to teach him appropriate physical technique for exercises and develop a bank of exercises and intensity levels he feels comfortable with as well as learning appropriate modifications that can be made to adjust and accommodate day to day for how he is feeling physically. Having a program for him to follow daily enhances self empowerment to take control over his health. Regular supervised exercise sessions with an exercise physiologist are recommended to continue to provide progressions, regression and implement exercises that would not be safe for him to do on his own. Due to transportation/location barriers of Mr Brennan’s situation our clinic is happy to travel to him and provide home based sessions. As seen through the positive results that were acquired over just 2 months, Exercise Physiology services will be highly beneficial for Mr Brennan on regular basis. By implementing exercise sooner rather than later we can reduce the burden of disease both to Mr Brennan himself as well as the health care system at large.

If you have require any further information or have any questions regarding this please email me on [demi.studiobenefit@gmail.com](mailto:demi.studiobenefit@gmail.com)

Kind regards,

A handwritten signature in black ink, appearing to read 'Demi Chapman', with a stylized, flowing script.

Demi Chapman  
Exercise Physiologist