

Pilot Exercise programme for Prostate cancer patients.



Background to pilot exercise programme

- Hormone Therapy continues to be a common treatment option for recurrent and locally advanced prostate cancer.
- Both long and short term treatment courses are associated with many undesirable side effects which can lead to a reduced QOL.
- Being physically active during and after cancer treatment reduces symptoms and has a positive impact on overall survival. (Loughney et al, 2015).
- A study of non-metastatic prostate cancer survivors demonstrated that men who participated in physical activity post cancer diagnosis had a lower risk of mortality (Irwin, 2012).

References

Irwin, M.L. (Ed) (2012) *ACSM Guide to Exercise & Cancer Survivorship* ACSM: USA
Loughney, L et al (2015) *Eur Journal of Surgical Oncology*. 41(12) pp1590-1602

Hormone Treatment side effect

Hot Flushes

Loss of Libido

ED

Cognitive function can be reduced

Fatigue

Gynecomastia

Osteoporosis

Obesity

Cardiovascular disease

Given the large side effect profile of HT it is understandable that HT is associated with a decrease in QOL

Body changes

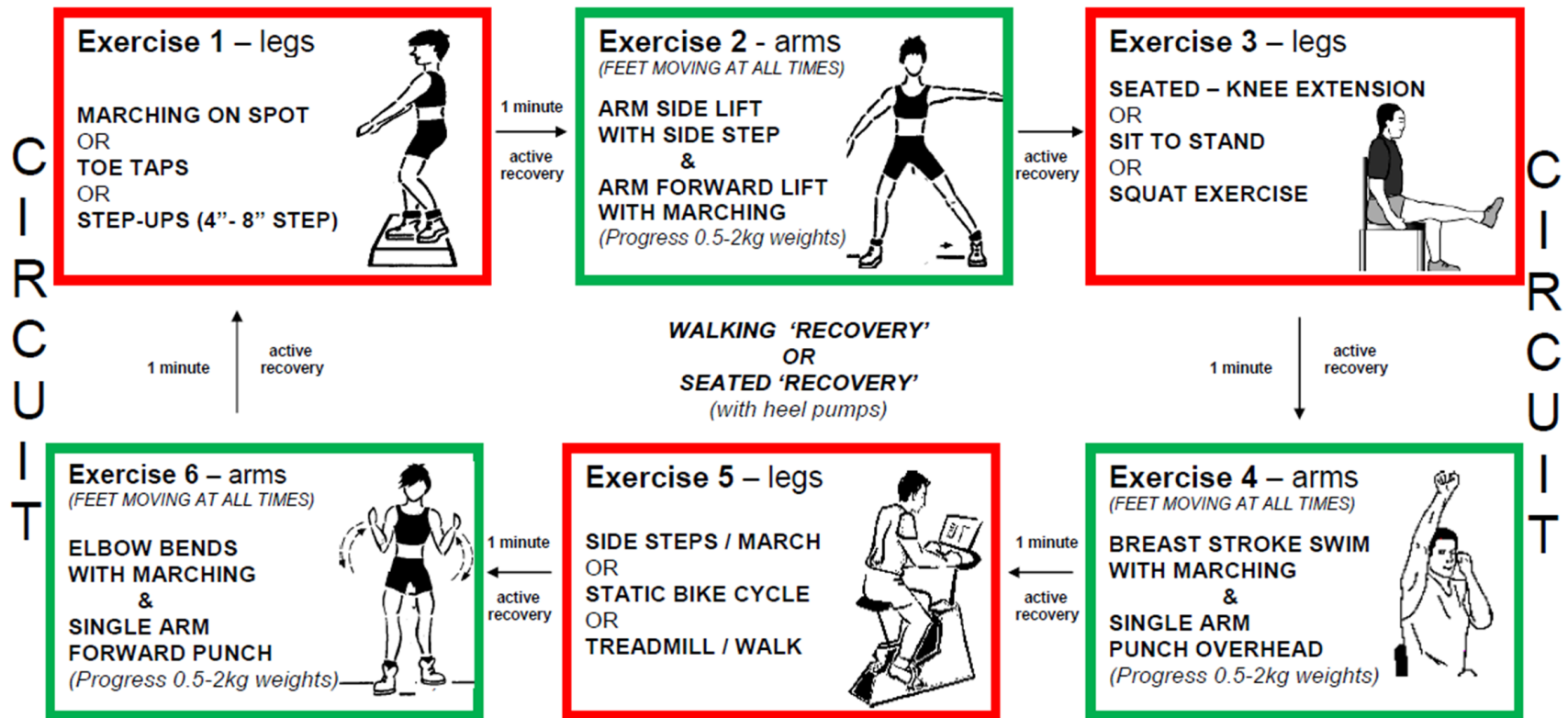
ADT is associated with significant body composition/metabolic changes including;

- Diabetes
- Hypercholesterolemia
- Coronary Artery disease
- Increase in body fat and decrease in lean muscle mass

Purpose and aims

- Advise on health benefits of exercise and principles of fitness
- Promote walking, activity goals and lifestyle behavioural change
- Assess functional capacity and prescribe individualised exercise
- Provide a supervised exercise programme to increase fitness
- Teach pacing, progression and individual adaptation of exercise
- Increase knowledge and confidence of exercise progression

Patient exercise circuit & home programme



Principles of your circuit workout

Practice each exercise for between 1.5 – 3 minutes as able, with 1 minute of walking or seated heel "pumps" before moving on to the next exercise. By alternating from ARM exercises (green boxes) to LEG exercises (red boxes) you will balance your workout and avoid fatigue.

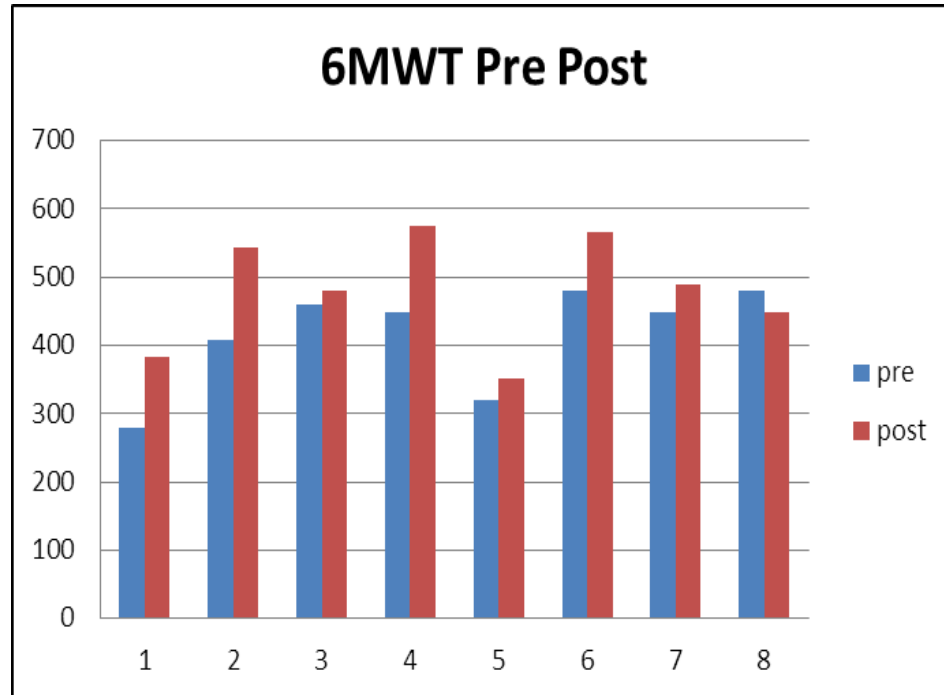
Exercise effort should be **MODERATE** you should be able to **talk and exercise**

Outcomes measures

Outcomes measures - 9 of 11 patients completed. 2 patients stopped after 4 sessions (1 unwell & 1 work pressure)

- Functional capacity assessment - compare distance walked @ six minute walk test (6MWT) at exercise entry and exit after 10 weeks
- Compare blood pressure and BMI at programme entry and exit
- Self-report questionnaire to compare fatigue and physical activity levels (e.g. walk, cycle, housework, gardening, gym)
- Evaluation of patient attendance and compliance with the exercise programme and rating of satisfaction with the programme e.g. content, usefulness and knowledge gained.

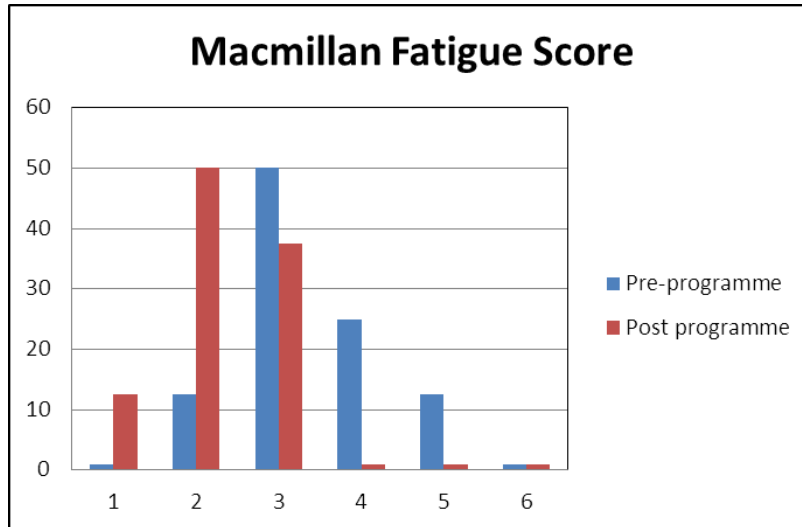
6MWT Pre & Post 10 week exercise programme



6MWT

At entry 6MWT distance was 279m-525m. 7 of 8 exit 6MWTs showed an increase of +32m to +137m; representing a 4.1%-37.6% increase. 1 patient had a decrease in his 6MWT due to hip pain. 1 patient didn't complete a 6MWT

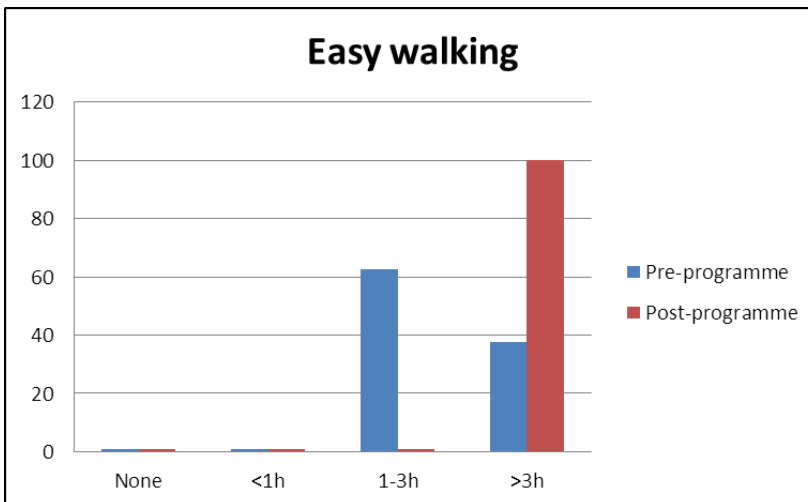
Macmillan Fatigue Score & Easy walking



Self reported physical activity (easy walking) and fatigue levels

At entry only 12.5% reported 'no or low' fatigue and 37.5% walked more than 3 hours per week

At exit an increased 62.5% said 'no or low' fatigue and 100% walked more than 3 hours per week



Satisfaction with programme

Satisfaction & rating of programme value

Value of content -

very good = 33.3%; excellent = 66.6%

Knowledge -

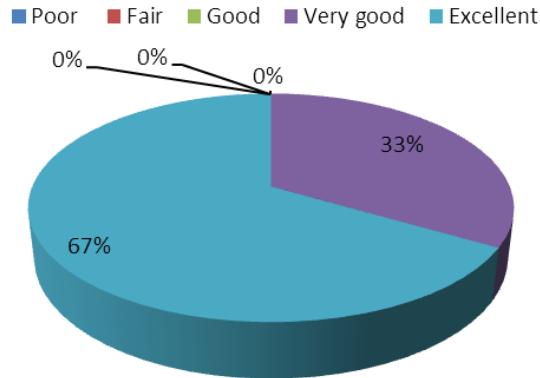
learnt lot = 22.2%; learn quite lot = 77.7%

Usefulness - *moderately useful = 44.4%
v useful = 55.5%;*

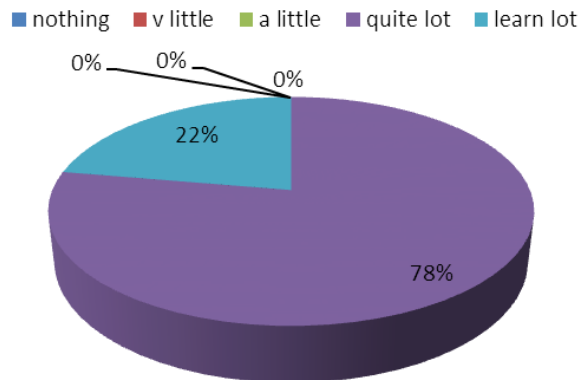
Prog met expectations - *YES = 100%*

Recommend to others - *YES = 100%*

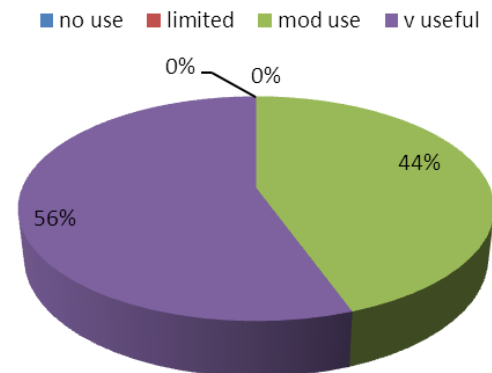
Content



Knowledge gained



Usefulness of programme



Graduation certificates!

Staff and patients after the 8 week programme



Conclusion

An exercise programme for prostate cancer patients proved effective and can be successfully integrated into a community cardiovascular health rehabilitation programme.