Staff guide: Physical Activity

Lung Cancer

Improves cancer-related fatigue

Helps depression

Helps anxiety

Improves sleep quality

Improves quality of life

Improves cardiorespiratory fitness

Improves cognitive function

Improves muscle strength

Reduces hormone/metabolic dysfunction

Helps joint pain

Helps body composition

Reduces post treatment complications

Helps lymphoedema

Helps sexual function

Minimum Guidelines For Adults

5 days a week for 30 minutes which increases heart rate and breathing so you can talk but not sing

Strength activities 2-3 x a week for large muscle groups at a level where you need a short rest before repeating the activity

If over 65 years old, do activities that challenge balance 2 x a week

1. Choose an activity and do it several times a week

2. Increase the amount of time per session

3. Make it more challenging i.e. adding speed, walking up hills, adding a weight

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Evidence for benefits in lung cancer

Physical activity before lung surgery has been shown to reduce hospital stay and recovery time. It has been shown to improve quality of life and reduce overall morbidity for all lung cancer types.

People who are already active

Encourage people who have been recently regularly physically active to continue with their physical activity. They may need to adapt to do a little less during ‘not so good’ phases of treatment.

Refer to physiotherapist for more advice.

Surgery

Exercise before and after surgery will help recovery. The amount and type of exercise will depend on symptoms. Seek advice from a physiotherapist if needed.

Practical advice:

- **Before surgery:** Walking, running, cycling and strength exercises are great examples of how to build fitness before surgery.
- **Recommendations:** Refer to prehabilitation (if available) or physiotherapist.
- **After surgery:** Take pain control as advised. Start by marching on the spot and then build to regular walks on the ward. Once home, build up daily walks at a pace where you feeling slightly out of breath but are still able to talk.
- **Movement:** Do range of movement exercises as prescribed by the physiotherapy team to support recovery.
- **Strength training:** After 6 weeks, low level strength training can begin. Encourage to start at a lower than normal level and build up slowly.
- **Surgical recommendations:** Follow advice from the surgical team regarding returning to contacting sports or heavy lifting after surgery.

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Chemotherapy

Physical activity can help with chemotherapy tolerance and reduce side effects.

- **Bone health:** Weight-bearing plus impact exercises (stairs, walking, jumping, running) are important for bone health as chemotherapy can cause bone loss.
- **Joint & muscle pain?** Physical activity can help. Warm up and cool down helps the body to prepare and recover from activity.
- **Muscle strength:** Exercises are important as chemotherapy can cause muscle loss.

Look out for:

- **Cardiotoxicity?** Consider referral to cancer physiotherapist for physical activity support.
- **Chemotherapy-induced peripheral neuropathy (CIPN):** Refer to cancer physiotherapist if CIPN impacts walking, balance, activities of daily living (ADLs) or falls.
  - A stationary bike, arm bike or seated exercises may be safer option.
  - If CIPN is painful, swimming or cycling may be more comfortable.
- **Platelets low:** Physical activity is good, but avoid activities which cause external impact i.e. risk of falls or bruising.
- **Low haemoglobin:** Do multiple short periods of daily physical activities rather than longer and fewer spells. Aim to work to a level where you are able to talk but not sing rather than use a heart rate monitor or smart watches.
- **Neutropenic:** Avoid busy or poorly ventilated gyms or pools during time of neutropenia. Try outdoors or home exercise instead. Avoid high intensity exercise until counts improve.
- **PICC line:**
  - Avoid swimming with PICC line in situ.
  - For strength training refer to physiotherapist for supervised training while PICC line is in situ.

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Immunotherapy

Research shows that stretching and exercise may reduce joint pain associated with immunotherapy.

- **Warm up and cool down:** helps the body prepare and recover from activity.
- **Stretching and strengthening** can help to increase blood flow to the muscles.
- **Exercise:** can also help you manage weight so there is less stress on joints. It can also strengthen bones and the muscles and increase joint flexibility.

Practical Advice:

- **Skin care:** Protect your skin if outside doing physical activity.
- **Footwear:** Wear comfortable socks and supportive footwear.
- **Protection:** Actively protect yourself against injury i.e. gardening gloves.
- **Swimming:** If you are swimming do shower and moisturise. If skin is irritated, please stop swimming.

Radiotherapy

Regular physical activity can help manage and reduce radiotherapy side effects.

- **Muscle strength:** Exercise is important as radiotherapy can cause loss of muscle strength.

Practical advice

- **Side effects peak:** Plan lower levels of physical activity for when the side effects peak.
- **Swimming:** is safe during radiotherapy. Do shower & moisturise. If skin is irritated, stop swimming.
- **Clothing:** Wear loose and comfortable clothing to avoid irritation and rubbing.
- **Hydration:** Drink more water than usual - radiotherapy can cause dehydration.
- **Protection:** Wear sun protection as required.

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Lymphoedema or limb swelling

Being physically active is good for reducing the risk of developing & managing symptoms of lymphoedema.

Good weight management can reduce the risk of further swelling or progression of swelling.

It is safe to do strength training when lymph nodes have been removed. Start low and progress gradually: low repetitions and low weights. Slowly increase the repetitions, add resistance i.e. weight and then add short sustained holds, monitoring always for lymphoedema symptoms.

It is safe to exercise when you have lymphoedema. Wear the compression garment if provided as directed by lymphoedema team.

Monitor how your swelling responds to different types of physical activity.

Sarcopenia or Cachexia

Strength exercise can help to maintain and rebuild muscles mass and strength. Physiotherapy can help to maintain function and help to achieve goals.

Consider a referral to physiotherapist along with a dietitian to help increase their physical activity.

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Fatigue

Regular physical activity and exercise is the best treatment for fatigue.

- As little as 30 minutes a day 3 days a week of moderate physical activity can show benefits.

Practical advice

- **Short sessions:** Start off with short sessions of physical activity and build up.
- **Avoid 'boom or bust'**: On good days do 80% of physical activity, and on 'not so good' days do 40%.
- **Bedrest**: Avoid total sedentary rest.
- **Record:** Keep a diary on how the fatigue responds to different activities.

Bone Mets/Lesions

Exercise can be safe and is beneficial for improving function, quality of life and reducing risk of falls & fractures.

Practical advice:

- **Fracture risk:** If at risk of fracture or are concerned, please refer to cancer physiotherapist for guidance.
- **Prevent falls:** Encourage to exercise in a safe environment to prevent falls and support with another person.
- **Stop and seek advice:** If they feel anything uncomfortable or out of the ordinary and speak to their CNS, cancer doctor or physiotherapist.

*** if bone mets present in area being exercised please refer to physiotherapist.

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Breathlessness

- **Rest is best?** The natural thing to do when breathless is to rest but this can make things worse as their fitness will decline with sedentary behaviour.
- **Anything is better than nothing:** Even small amounts of physical activity can improve function. Breathlessness may not change, but their function and fitness will improve.
- **Break activity down:** Small amounts is easier to manage i.e. plan physical activity around park benches.
- **Chairs:** If breathlessness is significant, recommend sit to stand and chair exercises.
- **Help with breathlessness?** Walking aids and breathlessness positions can help to walk further. Refer to physiotherapist for further help.

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