Cómo aprovechar la consulta de oncología para incentivar estrategias de prevención primaria: Ejercicio

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Exercise Is Medicine in Oncology: Engaging Clinicians to Help Patients Move Through Cancer
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THE 2020 IMPACT FACTOR FOR CA: A CANCER JOURNAL FOR CLINICIANS IS...

508.7
Exercise observed to reduce the relative risk of:

**CANCER RECURRENCE**
- Hazard ratios from meta-analysis studies range from 0.70 (0.63–0.78) (n = 21,647) to 0.65 (0.56–0.75) (n = 30,680)

**CANCER MORTALITY**
- Hazard ratios from meta-analysis studies range from 0.72 (0.60–0.86) (n = 21,382) to 0.56 (0.39–0.78) (n = 10,470)

**ALL-CAUSE MORTALITY**
- Hazard ratios from meta-analysis studies range from 0.76 (0.62–0.90) (n = 2370) to 0.52 (0.43–0.64) (n = 21,647)

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**Exercise**

Regular, moderate-intensity aerobic (e.g., brisk walking) and resistance (e.g., lifting weights) exercise during and after cancer treatment

- ∫ Cancer-related fatigue
- ↓ Physical deconditioning
- ↓ Psychological distress
- ↑ Quality of life
Why is being active good for me?
Here are some of the ways that you and your family might benefit from being more active:

- Keep a healthy weight
- Reduce risk of cancer
- Improve mood and reduce stress
- Reduce risk of heart disease
- Reduce risk of dementia and depression
- Reduce risk of osteoarthritis
- Reduce risk of falls in older adults
- Chance to socialise
- Develop new skills

Exercise can help you prevent muscle loss, decrease fatigue and increase functionality during cancer treatment. It is safe and free!

1. Consult with your oncologist
   - Consult with your oncologist and surgeon.

2. Start slowly.
   - Increase your exercise duration over time. Take as frequent breaks as you need.

3. Aerobic exercise
   - Frequency: at least 3-5 days/week
   - Intensity: Moderate (not so hard that you can't carry on a conversation)
   - Time: 20-60 minutes. (Better to split that in short bouts during cancer treatment.)
   - Type: rhythmic, weight bearing exercises, using large muscles.

4. Resistance training
   - Frequency: 2-3 days/week
   - Intensity: Moderate
   - (start out with weights you can lift 10-15 times but begin with 3-5 repetitions, then build up to 15 reps.)
   - Time: 1-3 sets
   - Type: start with machine weights, progress to free weights as you improve strength and balance

5. Flexibility and balance training
   - Flexibility and balance training is also very beneficial for you! Consider doing yoga, tai chi or pilates.

6. Stretching
   - Stretch large muscle groups and tendons after each training session. Each stretch should last 10 to 30 seconds and be repeated 3 to 4 times.

7. Be safe
   - Do not exercise with fever, risk of bleeding, anemia, abnormal blood counts, extreme fatigue or extreme pain.

8. Key message
   - Listen to your body!
   - Avoid inactivity!
Ejercicio y cáncer en la consulta
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Despite the exercise recommendations, an analysis of greater than 9000 cancer survivors indicated that only between 30% and 47% met current physical activity guidelines.

In the Health Information National Trends Survey cohort, approximately 45% of cancer survivors reported regular physical activity, although this varied by tumor site (32% vs 53% in breast cancer vs prostate cancer survivors, respectively).

Data from the United Kingdom indicated that 31% of people living with and beyond cancer are completely inactive.

**Reasons for a lack of regular exercise among people living with and beyond cancer are multifactorial, but multiple studies have documented a lack of recommendation from an oncology clinician.**

Among the reasons for this is a lack of clarity on the part of those who work in oncology clinical settings of their role in assessing, advising, and referring patients to exercise.
Exercise prescription for all people with cancer

Avoid inactivity and be as physically active as their current condition allows (ie return to normal daily activities as soon as possible after cancer diagnosis)

Progress towards and maintain participation in regular, moderate-intensity aerobic (eg brisk walking) and resistance (eg lifting weights) exercise

Tailor the exercise recommendations to the individual’s abilities, noting that adaptations may be required on the basis of cancer- and treatment-related side effects, disease trajectory and current health status
Unfortunately, oncologists have no training in exercise medicine and cannot realistically prescribe physical activity or exercise.
The 5 A’s model

1. Assessing BMI, physical activity, and diet
2. Advising patients about the health risks of obesity; the benefits of weight loss, physical activity, and good nutrition; and treatment options
3. Agreeing on weight loss and behavior change goals and treatment plan details
4. Assisting patients in identifying and addressing barriers by providing resources, including referrals
5. Arranging follow-up to provide ongoing assistance or referrals as needed

Oncology Clinicians’ Guide to Referring Patients to Exercise

**Step 1: ASSESS**

**Question #1:** How many days during the past week have you performed physical activity where your heart beats faster and your breathing is harder than normal for 30 minutes or more?

**Question #2:** How many days during the past week have you performed physical activity to increase muscle strength, such as lifting weights?

**Question #3:** Would this patient be safe exercising without medical supervision (e.g.; walking, hiking, cycling, weight lifting)?

### Question #3 answer is Yes.
(Patient is ambulatory, ECOG score 0-2)

- **Step 2: ADVISE**
  - EIM ExRx for Oncology, based on current report of activity to increase to:
    - Moderate intensity aerobic exercise (talk but not sing) for up to 30 min, 3 times/wk
    - Resistance exercise 2x weekly 20-30 min
  - **Step 3: REFER** to best available community program

### Question #3 answer is No

*Or*

I’m not sure and I don’t have the capacity to evaluate.
(ECOG score 3+ or other complications present)

- **Step 2: ADVISE**
  - Advise patient to follow-up with outpatient rehabilitation healthcare professional for further evaluation
- **Step 3: REFER**
  - Outpatient rehabilitation health care professional will recommend best available program

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*Repeat at regular intervals at clinical encounters during and after active treatment*

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Patients need referral to appropriate exercise programming based on their current activity levels, medical status, and preferences.

Some patients may already be regular exercisers and/or may prefer to exercise on their own. However, especially during treatment, patients are at risk for developing side effects that are a barrier to exercise. Patients may underestimate how the treatment might affect their ability to exercise on their own. Also, current evidence indicates that exercise under supervision yields better outcomes.

Therefore, even for currently active patients, regular evaluation of activity levels is needed, and referral to exercise programming could be valuable.
Start where you are. **Use what you have. Do what you can.**

**Getting Started**

**Keep It Simple**
Avoid inactivity! If you get moving as soon as you are diagnosed, you'll feel better. Walk to the mailbox. Walk the dog. Dance in the kitchen. Do laps around the dining room table. Find opportunities to move throughout your day.

**Talk with Your Doctor**
Talk to your health care provider before you start a new exercise program. Are there any activity limitations due to medications, surgeries or treatment?

**Expert Support**
Ask if your hospital or local wellness center has a structured cancer exercise program. ACSM Certified Cancer Exercise Trainers (CETs), some physical therapists or members of the health care team can help you design your activity plan.

**Build a Plan**
Keep a daily log of your exercise, fatigue (0-10 scale), medications and treatments. This will help you learn what works best. Find an activity buddy from home, work or a cancer support group to stay motivated.
Start where you are. Use what you have. Do what you can.

Aerobic Activity

Aerobic activity increases your heart rate and breathing. Build up to doing 150 minutes/week of moderate-intensity activity (like walking, light cycling, yoga, tai chi or water exercise), 75 minutes/week of vigorous activity (like brisk walking, singles tennis or hiking hills) or a combination of both. You’ll improve the way your body stores and uses energy, as well as your stamina and heart health.

What?
Any rhythmic, continuous activity!

How often?
3-5 days/week

How hard?
Fairly light to somewhat hard

How much?
Start w/ a few minutes. Gradually build up to 30-60 total minutes over the day.

Remember: Fit in 5 or 10 minutes here and there. Or go for 20-30 minutes. During treatment, several short sessions may work better than one long one. Be active however you can.
What’s the difference?

MODERATE vs VIGOROUS ACTIVITY

**You can talk, but can’t sing.**

On a scale of 0-10 you would rate the activity as a 5 or lower in terms of difficulty.

Your heart rate is at 50 to 60% of your maximum heart rate.

**Aim for one hour and 15 minutes of vigorous activity or 2½ hours of moderate activity each week.**

**You can say a few words, but you can’t hold a conversation.**

On a scale of 0-10 you would rate the activity as a 6 or higher in terms of difficulty.

Your heart rate is at 70 to 80% of your maximum heart rate.
Start where you are. Use what you have. Do what you can.

Strength Training

Strength training is important for people with cancer because it builds muscle. Muscle tissue plays a big role in balance, fatigue and quality of life. Muscle may also be important to processing chemotherapy drugs. You don’t have to be a bodybuilder! Plus, strength training can make daily activities like lifting laundry baskets or yardwork easier and safer.

What?
Hand weights, resistance bands, weight machines or your own body (for example, kitchen counter push-ups or chair squats).

How often?
2-3 days/week
*Rest day in between!

How hard?
Start with light effort. Build up to medium or hard effort.

How much?
10-15 repetitions to start (for each major muscle group). Build up to 8-12 reps of challenging effort.

Remember: If you need it, get help from a certified exercise professional. They can teach you the right way to do exercises and how to breathe properly. If you have lymphedema, you may benefit from wearing a compression sleeve during strength training.
Start where you are. **Use what you have. Do what you can.**

**Other Types of Physical Activity**

Aerobic activity and strength training are at the heart of a program for those with cancer. But you may enjoy and benefit from these other options.

- **Flexibility**
  Gently stretch your muscles 2-7 days/week to the point of feeling tightness. Hold for 10-30 seconds. Make sure to stretch specific areas recommended by your health care provider.

- **Take More Steps**
  Simply take more steps! Use a smartphone or activity tracker to measure your progress and stay motivated. Slowly build up to 7,000-9,000 steps/day.

- **Just for Fun**
  Find ways of being active that are just plain fun. Dance to your favorite song. Try yoga or tai chi. Play with your kids or grandkids. Find what makes you smile and do it often.

- **Balance**
  Exercises may include standing on one foot, walking on a line or using a balance board. Train in an uncluttered area and use a chair or wall for support if needed.
• One key point to clarify is that oncology clinicians are not expected to give specifics of exercise prescriptions (eg, to prescribe specific resistance training exercises, equipment, or progression of weights) or to do extensive screening and triage to determine whether exercise needs to be done in a rehabilitative versus community setting.

• Oncology clinicians, however, play a vital role in telling the patient that it is important to exercise and pointing patients in the right direction to make that happen.

An analogy to this might be when the oncology clinician refers a patient to resources for psychosocial distress. The oncology clinician is not asked to clinically evaluate for depression, anxiety, or other conditions as if they had the same training as a clinical psychologist. However, the oncology clinician can play a crucial role in pointing the patient toward psychological services.
To do this will require care coordination with appropriate professionals as well as change in the behaviors of clinicians, patients, and those who deliver the rehabilitation and exercise programming.

Referral to appropriate exercise programming is the goal, ideally achieved by having a health care professional with appropriate training for risk stratification and the early detection of treatment-related adverse effects integrated into patients’ clinical pathways.
Ejercicio y cáncer en la consulta

Oncologists to refer patient based on specific needs (or likelihood of needing an assessment)

HEALTHCARE PROVIDER SUPERVISED EXERCISE PROGRAMS

Cancer Rehabilitation & Clinical/Therapeutic Exercise

COMMUNITY EXERCISE PROGRAMS

Supervised

Self-directed

Targeted exercise intended to address specific clinical outcomes (e.g.; return patients to sufficient physical function to normal daily activities, fatigue, CIPN)

SETTING

In/Out-patient Rehabilitation
Medical Clinic based Exercise Facility

HEALTHCARE PROVIDERS

Physiatrists
Physical Therapists
Clinical Exercise Physiologists
Occupational Therapists
Nurses

Communication between settings is crucial

Supervised and unsupervised exercise programming

SETTING

Primary Care
Community
Fitness Center
Home

HEALTHCARE PROVIDERS

Exercise Physiologists
Nurses
Fitness Professionals
Peer Coaches

SETTING

Community
Fitness Center
Home

PRACTITIONERS

Fitness Professionals

Unsupervised exercise
Independent exercisers

Oncologists are critical to the effective promotion and durable uptake of physical activity among survivors of cancer

• Oncologists review their patients regularly—in many instances for several years after diagnosis—and are often perceived by their patients as authority figures; therefore, they are in a unique position to promote the uptake of durable physical activity.

• Survivors of cancer want to receive physical activity information and would prefer to receive this information from their oncologists.

• Oncology clinicians play a vital role in telling the patient that it is important to exercise and pointing patients in the right direction to make that happen. Referral to appropriate exercise programming is the goal.

• The challenge is to identify physical activity interventions that are accessible and sustainable and that can be generalized to a large proportion of survivors of cancer.
¡prescribir, en lugar de recomendar!