THE COLLEGE OF FAMILY PHYSICIANS OF CANADA

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Diagnosis to Survivorship - The Spectrum of Cancer Care from a Family Physician Perspective: Part 4

Late effects and long-term physical problems

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MIGS | SGIM

Presenter Disclosure

- **Faculty:** Nureen Sumar
- **Relationships with financial sponsors:**
  - CAGPO – Training Scholarship (Harvard Center for Palliative Care PCEP 2020)
- **Other:** Employee of Alberta Health Services (Dept of Family Medicine) and Aga Khan University (Departments of Haematology-Oncology / Family Medicine)

Presenter Disclosure

- **Faculty:** Genevieve Chaput
- **Relationships with financial sponsors:**
  - **Grants/Research Support:** MIGS grant Oncology Briefs
- **Other:** None

Presenter Disclosure

- **Faculty:** Alexandra Ginty
- **Relationships with financial sponsors:**
  - **Speakers Bureau/Honoraria:** OH-CCO RPCL Cancer Screening stipend, speaker honorarium PriMed 2021

Presenter Disclosure

- **Faculty:** Anna Wilkinson
- **Relationships with financial sponsors:**
  - **Grants/Research Support:** MIGS Grant BCS, Oncology Briefs
  - **Speakers Bureau/Honoraria:** Speaker Honoria OCFP ASA
- **Other**: CPAC - travel to meetings, OH-CCO RPCL Stipend

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- **Faculty:** Sian Shuel
- **Relationships with financial sponsors:**
  - None
- **Other:** Employed by BC Cancer's Family Practice Oncology Network

Late effects and long-term problems

1. Cardiovascular disease risk assessment
2. Anthracycline-induced cardiac toxicity
3. Pain
4. Lymphedema
5. Sleep disorders
6. Anxiety, depression, trauma, and distress
7. Cognitive function
8. Fatigue
9. Hormone-related symptoms
10. Sexual function
11. Employment and return to work

Learning Objectives

1. Comprehend the importance of cardiovascular disease (CVD) risk assessment in cancer survivors
2. Recognize signs and symptoms suggestive of anthracycline-induced cardiac toxicity
3. Increase awareness of common cancer pain syndromes and their management
4. Become familiar with cancer-related lymphedema and its management

Cardiovascular disease risk assessment

CVD: Leading Cause of Death in Cancer Survivors

Why?

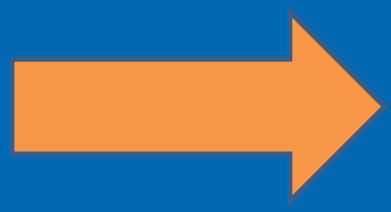
- Shared risk factors for cancer and CVD
  - Tobacco, obesity, poor health behaviors
  - Hypertension, hyperlipidemia, diabetes more common in cancer vs non-cancer populations
- Cancer treatments increase CV risk
  - Cytotoxic chemotherapy, endocrine therapy, targeted therapies, radiotherapy associated with diverse cardiovascular toxicities

Heart Disease in Cancer Survivors

CV Risk Factors

+

Cardiotoxic
Cancer Treatments



- Cardiomyopathy
- Hypertension
- Hyperlipidemia
- Arrhythmias
- Myocardial Infarction
- Cerebrovascular accidents
- Heart failure

What should be included in a CVD risk assessment for a cancer survivor?

1. Pre-existing / emerging CVD

- CAD, CHF, PVD

2. CVD risk factors

- HTN, Dyslipidemia, Obesity, DM, Diet/Exercise, Smoking
- → interventions for modifiable RFs

3. Cancer treatment history

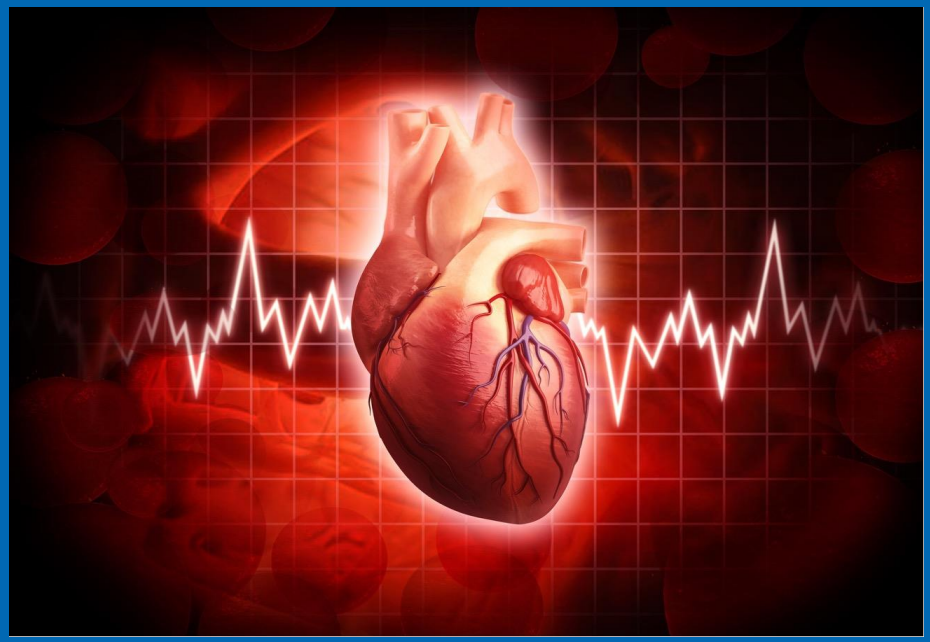
- Systemic therapy, radiation field, cumulative doses of cardiotoxic drugs

May need referral to cardio-oncology/specialist care

Family physicians are instrumental to optimize cardiovascular health of cancer survivors!

Bottom line…

Control of CVD and management of risk factors associated with CVD and cancer can decrease the risk of CV-related events and deaths in cancer survivors



Cancer treatment-related cardiotoxicity

Cardiotoxicity due to Antineoplastics

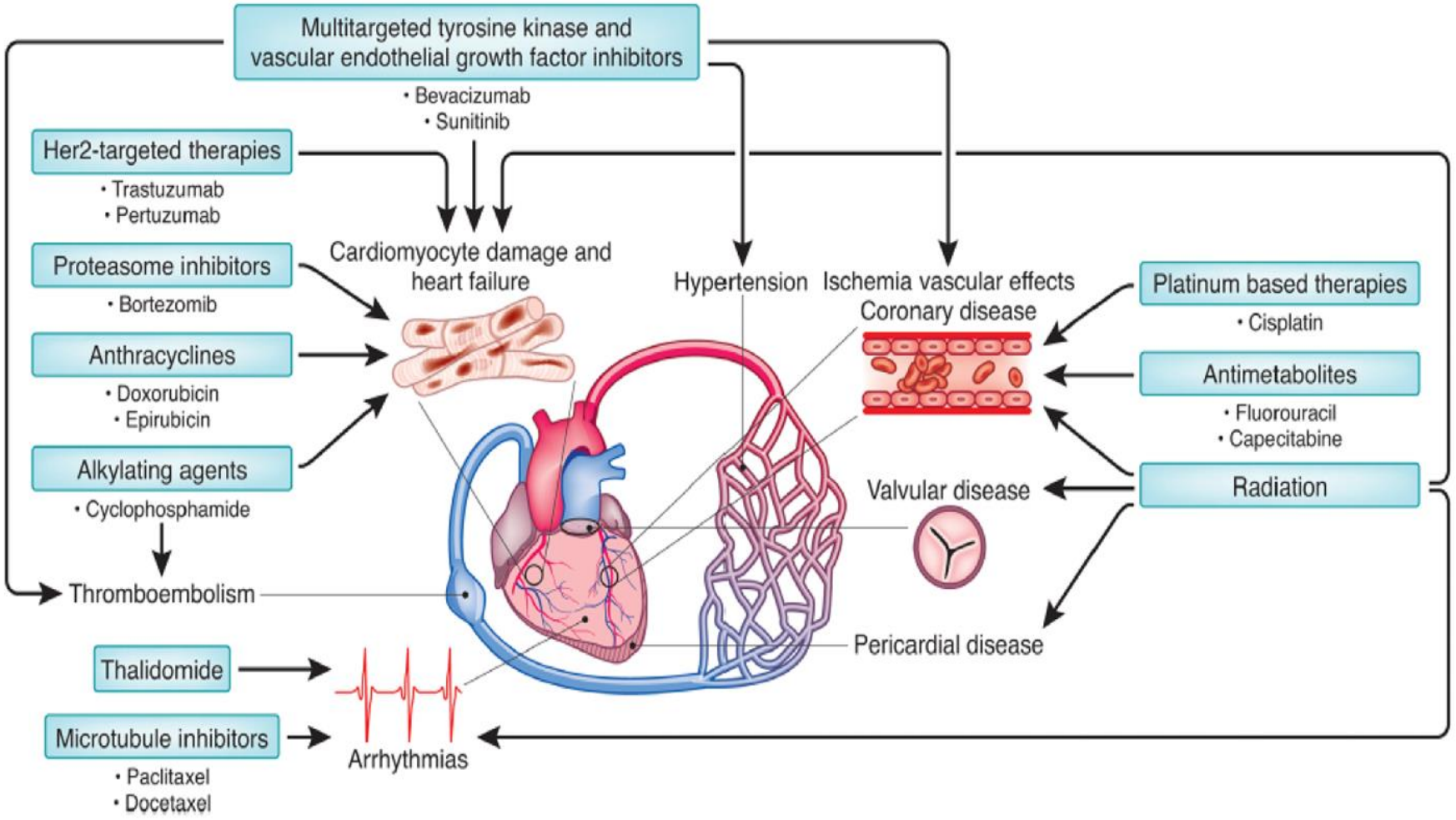


Figure 1. An overview of the cardiovascular side effects of chemotherapy and radiation.

Lenneman, C.G. and Sawyer. (2016). Cardio-Oncology: An update on cardiotoxicity of cancer-related treatment. *Circulation Research*. 118:1008-1020.

Anthracycline Induced Cardiotoxicity

Anthracyclines

- Doxorubicin / Adriamycin, Epirubicin, Daunorubicin
  - Breast cancers, sarcomas, lymphomas
  - Damages heart myocytes by oxidative injury
- Takes YEARS or DECADES to manifest
  - Early detection of HF may be more responsive to cardioprotective meds
- Clinically screen for HF in all survivors with exposure to anthracyclines, consider ECHOs in high-risk survivors

  → may require referral (cardio-oncology)

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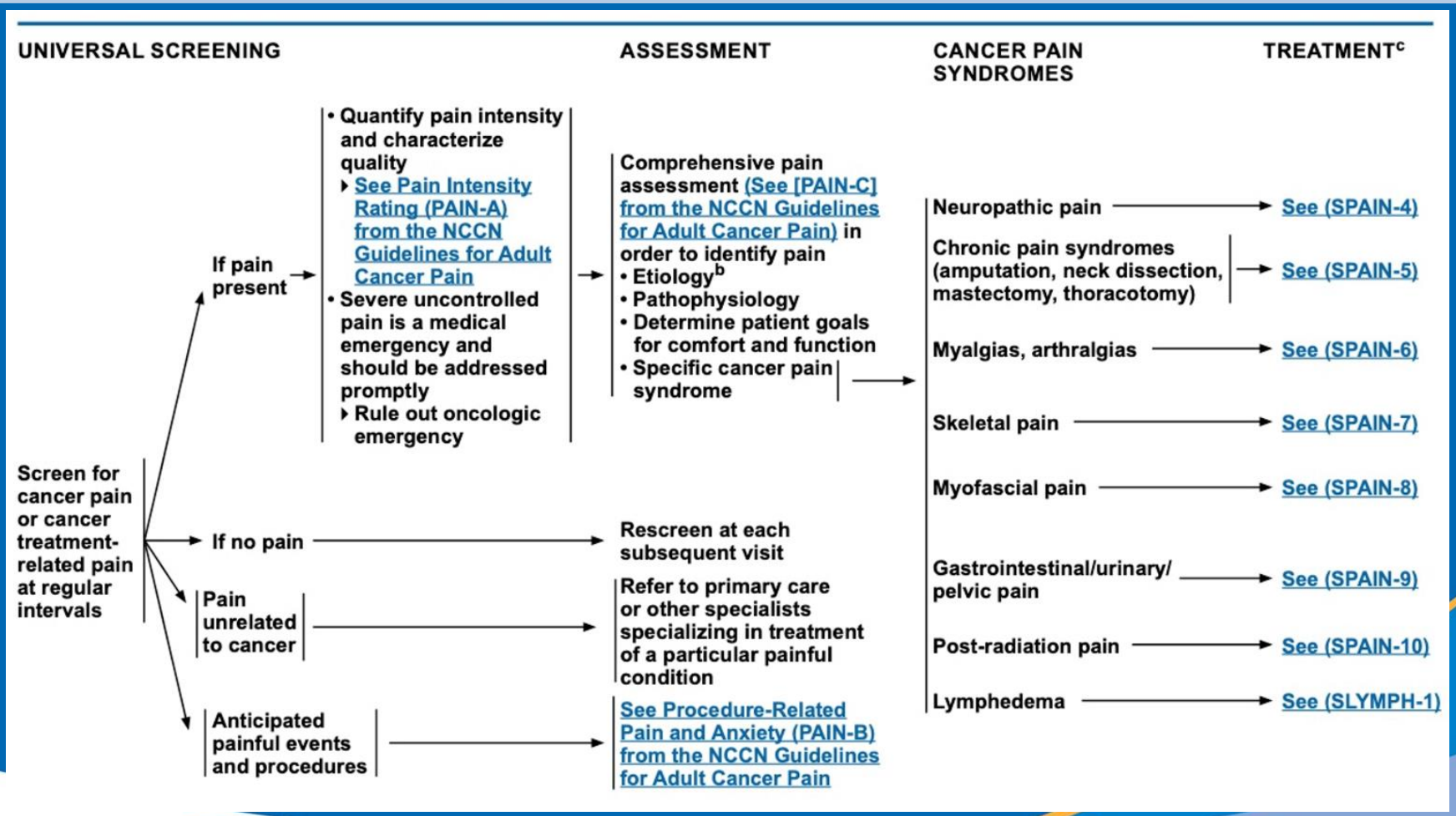
Pain

Pain: General principles

- Comprehensive pain assessment to identify cause of pain
  - Acute, new = rule out cancer recurrence or progressive disease
  - Chronic = identify a cancer pain syndrome to guide management
- Goal setting and expectations
- Comprehensive pain management approach
  - Non-pharmacological
  - Pharmacological
- Use of adjuvant rx based on pain syndrome
- Psychosocial support, when indicated

Cancer pain syndromes



Chemotherapy-induced peripheral neuropathy (CIPN)

- Pathological insults to neurons is caused by a substantial number of cytotoxic cancer agents, including:
  - taxanes, platinums, vinca alkaloids, epothilones, eribulin, and bortezomib
- Can alter treatment course
- Can adversely impact patients' quality of life and overall functioning
- ASCO Guideline updates
  - Evidence on prevention and treatment of CIPN

Treatment of Chemotherapy-induced peripheral neuropathy

ASCO 2020 Guideline updates:

Treatment of chemotherapy-induced peripheral neuropathy for patients who have completed neurotoxic chemotherapy	For cancer patients experiencing painful CIPN, clinicians may offer duloxetine.	Type: Evidence based; benefits equal harms Evidence quality: Intermediate Strength of recommendation: Moderate
	Outside the context of a clinical trial, no recommendations can be made on the use of the following interventions for the treatment of CIPN: • Exercise therapy • Acupuncture • Scrambler therapy • Gabapentin/pregabalin • Topical gel treatment containing baclofen, amitriptyline HCL, plus/minus ketamine • Tricyclic antidepressants • Oral cannabinoids	Type: No recommendation Evidence quality: Low Strength of recommendation: Not applicable
	Note: While recent preliminary evidence suggests a potential for benefit from exercise, acupuncture, and scrambler therapy, larger sample sized definitive studies are needed to confirm efficacy and clarify risks.	

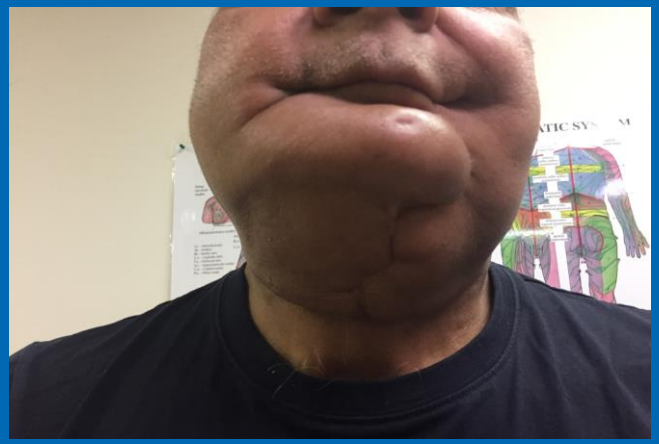
Aromatase inhibitors: Arthralgias

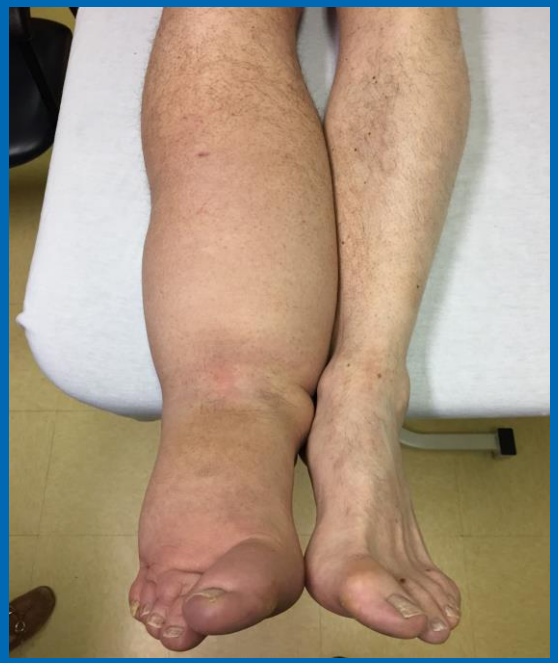
Key: assess treatment adherence at regular intervals!

Management:

- Non-pharmacological
  - Physical activity
  - Acupuncture
- Pharmacological
  - SNRIs (duloxetine, venlafaxine)

Lymphedema





Cancer-related lymphedema

- Chronic inflammatory condition that results from damage to the lymphatic system
- Can occur within weeks, months, or years after treatment completion
- Treatments for breast, gynecologic, prostate, and head-and-neck cancers, and for melanoma and other skin cancers are most frequently associated
- Incidence varies widely based on cancer site and treatment modalities: estimates range from 5% to 83%

Lymphedema diagnosis

- Diagnosis is based on clinical presentation and examination findings
- Must screen and assess for potential causes of swelling other than cancer-related lymphedema:

Unilateral limb swelling
Deep vein thrombosis
Post-thrombotic syndrome
Arthritis
Traumas
Active cancer or recurrence

Bilateral lower limb swelling
Obesity
Chronic venous insufficiency
Major organ insufficiency or failure (CHF, renal or liver dysfunction)
Iatrogenic (side effects of medications such as steroids, NSAIDS, CCB)

- Swelling secondary to lymphedema can coexist with swelling from other comorbid conditions

Lymphedema management

- Decongestive lymphatic therapy is “gold standard” of management
- 2 phases: reduction and maintenance
- Goals are:

Educate patients

Reduce limb volume and fibrosis

Minimize infection risk (cellulitis)

Provide risk reduction strategies

Improve limb cosmetic appearance and quality of life

Promote exercise/healthy lifestyle

Restore function mobility and activities of daily living

KEY: Prescribe compression garment and refer to a lymphedema therapist/fitter!

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Concluding remarks

- Check out the other webinars and podcasts in the series
  - Tips for expediting cancer diagnosis
  - Cognitive and psychosocial impacts for cancer survivors
  - Surveillance and recurrence prevention

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