

# Beyond Cancer: Integrating Primary Care in Survivorship

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## Learning Objectives

Upon conclusion of this program, participants should be able to:

- Review survivorship and survivorship plans.
- Discuss the unique primary care issues patients are likely to face during survivorship.
- Identify evidence-based treatments of the common issues patients face during survivorship.
- Outline an evidence-based surveillance plan for cancer survivors.
- Describe strategies for preventative screening, physical activity, diet, and weight management for survivors.

# DISCLOSURE

## Speaker(s)

No Relevant Financial Relationship(s)

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## Survivorship Definition

- Begins at diagnosis
- Continuing to receive treatment
- **\*\*After finishing treatment\*\***

## Survivorship Rates

- Improved due to:
  - Earlier diagnoses
  - More effective treatments
  - Prevention
  - Decreases in mortality

## Standards for Survivorship Care

- Prevention
- Surveillance
- Assessment
- Intervention
- Coordination of care
- Planning

## Survivorship Care Plans

- Institute of Medicine
  - Individualized survivorship care plan
  - Guidelines
  - Vary based on institution
- Options
  - ASCO (American Society of Clinical Oncology)
  - OncoLife
  - Minnesota Cancer Alliance
  - Other local resources

## Survivorship Plan Details

- Type of cancer
- Procedures/Surgeries
- Medications (chemotherapy)
- Radiation therapy
- Ongoing surveillance
- Late effects (acute, late, long-term)
- Support for psychosocial concerns
- Healthy lifestyle tips



## Case 1 – Infertility

- History
  - 29 year old male, GME
    - Recurrent kidney stones
- Past Medical History
  - Wilm's Tumor, Kidney age 1
    - Nephrectomy
    - Chemotherapy: vincristine, dactinomycin
    - No radiation
      - Remission < year later

## Case 1 - Infertility

- Social
  - Non-smoker
- Physical Examination
  - Otherwise normal
    - Scar line at kidney
- Of note, wife mentions they are interested in having children in future

## Causes Infertility

- Alkylators
  - Cyclophosphamide (Cytosan)
  - Ifosfamide
  - Nitrogen mustard
  - Procarbazine
  - Melphalan
  - Busulfan
  - Chlorambucil
  - Lomustine (CCNU)
  - Carmustine (BCNU)
  - Thiotepa
  - Dacarbazine (DTIC)
  - Temozolamide
  - Carboplatin
  - Cisplatin
- Radiation
- Surgery

## Monitoring

- Yearly physical
  - Bloodwork
    - FSH, LH, Testosterone
      - Low testosterone
        - Replacement therapy
          - Gel, skin patch, injections
- Referral

## Semen Analysis

- Azoospermia
  - Radiation
    - Return of sperm production unlikely
  - Chemotherapy
    - Variable (months, years, permanent)
  - Options
    - Surgical harvesting of sperm
    - Another disorder
    - Sperm Donor (with IUI or IVF)
    - Adoption

## Semen Analysis

- Low Sperm Count
  - Repeated several times
  - Options
    - Artificial insemination or in-vitro fertilization (IVF)
- Abnormal
  - Candidate for hormones
  - Testicular biopsy
- Normal
  - No further testing

## Bearing Children

- No specific guidelines for trying to have a child after finishing cancer treatment
- Patients may have grief and anger
  - support them as they cope
- Genetic counseling

## Case 2: Cardiotoxicity

- History
  - 54 year old female, GME
  - Knee pain
- Past Medical History
  - Breast cancer
    - Surgery
      - Lobectomy
    - Chemotherapy
      - Anthracycline
    - Radiation
      - Chest



## Physical Examination

- Otherwise normal
  - Scar line at left breast

## Cardiotoxicity

- Toxicity that affects the heart
  - Acute or subacute
    - Up to 2 weeks
  - Chronic
    - Within 1 year
  - Late Cardiotoxicity
    - More than 1 year

## Cardiotoxicity

- Reduction of LVEF
- Symptoms or signs associated with heart failure
- Reduction in LVEF from baseline

## Causes

- Chemotherapy:
  - Anthracyclines
    - Doxorubicin
    - Daunorubicin
    - Idarubicin
    - Epirubicin
    - Mitoxantrone
  - HER-2
    - Trastuzumab
  - Fluoropyrimidines
    - Fluorouracil
    - Capecitabine
- Radiation
  - Chest

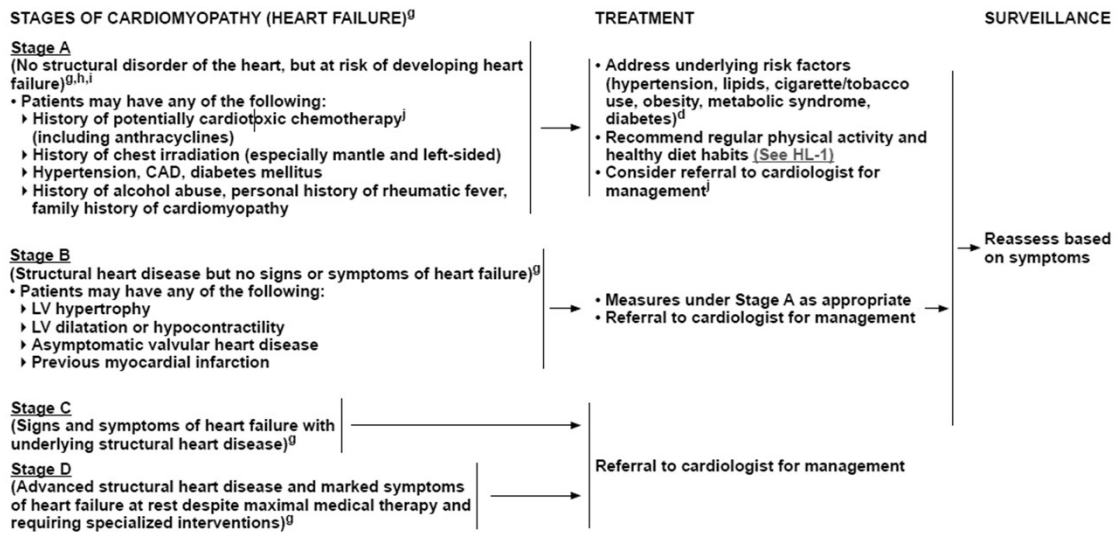
## Causes

- Risk factors
  - Hypertension
  - Coronary Artery Disease (CAD)
  - Diabetes
  - Smoker
  - Obesity
  - Physical Inactivity
- History
  - Alcohol Abuse
  - Rheumatic Fever
  - Family History
    - Cardiomyopathy

## Cardiotoxicity Questions

- Do you have shortness of breath or chest pain after physical activities (e.g. climbing stairs) or exercise?
- Do you have shortness of breath when lying flat, or wake up at night needing to get air?
- Do you have persistent leg swelling?

# Management



Survivorship (version 1.2020). National Comprehensive Cancer Network Web site. [https://www.nccn.org/store/login/login.aspx?ReturnURL=https://www.nccn.org/professionals/physician\\_gls/pdf/survivorship.pdf](https://www.nccn.org/store/login/login.aspx?ReturnURL=https://www.nccn.org/professionals/physician_gls/pdf/survivorship.pdf). Accessed February 24, 2020.

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## Case 3: Peripheral Neuropathy

- History
  - Hands tingling
- Past Medical History
  - Acute Lymphocytic Leukemia
    - Vincristine, corticosteroid, anthracycline
- Physical Examination
  - Good strength
  - Sensation to light touch
    - abnormal bilateral hands



## Symptoms

- Deficits in sensory, motor, and autonomic
- Symptoms:
  - Numbness
  - Tingling
  - Altered touch sensations
  - Impaired vibration
  - Paresthesia and dyesthesias
- Pain
- Muscle weakness
- Mechanical/thermal allodynia or hyperalgesia
- Constipation
- Dizziness

## Causes

- Cancer itself
- Radiation Therapy
- Chemotherapy
  - Platinum based neoplastic
    - Oxaliplatin
    - Cisplatin
  - Vinca alkaloid
    - Vincristine
    - Vinblastine
  - Epothilones
    - Ixabepilone
- Taxanes
  - Paclitaxel
  - Docetaxel
- Proteasome inhibitors
  - Bortezomid
- Immunomodulatory drugs
  - Thalidomide

## Timeline

- Acute
- Transient thermal sensations
- Permanent changes
  - Chronic pain
    - Irreversible nerve damage

## Preventative Screening

- No different from the general population
- Age/risk-appropriate recommended:
  - i.e. Breast, Cervical, Colon, Lung
  - Dental
  - Vision
- Genetic Testing

## Healthy Lifestyle

- Stop Smoking
- Physical Activity
  - 150 minutes weekly of moderate aerobic
  - resistance (strength) training
    - two or three days per week
- Weight management
- Healthy Sleep
- Osteoporosis
- Sun Protection

## Healthy Lifestyle

- Diet
  - Reduce alcohol intake (limit to 1 drink daily for women or 2 drinks daily for men)
  - Increased fruits and vegetables (2.5 cups daily)
  - Whole grains instead of refined
  - Limit processed foods, excess sugars, fried foods
  - Low-fat foods
  - Reduce red meat

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