# SURVIVORSHIP WITH LYMPHOMA


**APRIL SHAMY MD,CM**

JEWISH GENERAL HOSPITAL

MCGILL UNIVERSITY

McGill

CANCER SURVIVOR

WITH MY
FAMILY,
FRIENDS,
AND FA
I BEAT

I am a SURVIVOR

CANCER
TERMINATOR
I FOUGHT
I WON!

SURVIVOR
I STOOD STRONG
I FOUGHT HARD
I WON
HODGKIN'S LYMPHOMA
Awareness

Non-Hodgkin's Lymphoma
SURVIVOR
.... and STAYING one!

# Some Statistics

- Approximately 1 in 2 Canadians develop cancer
- 25% of Canadians die of cancer
- 2009: 810,000 Canadians living with cancer diagnosed within 10 years

- *New cases increasing*: awareness, screening, baby boomers
- *Survivors increasing*: better treatment, more treatments, better supportive care

# More Statistics

| Non-Hodgkin Lymphoma | CLL | Hodgkin Lymphoma |
| --- | --- | --- |
| 55% 10-year relative survival rate<br>5th most common cancer<br>>30 types | 50% 10-year survival rate<br>15th most common cancer | • 80% 10-year survival rate |

# Who is a Cancer Survivor?

[sur · vi · vor]

*to beat the odds, one with great courage and strength, a true inspiration*

An individual is considered a cancer survivor from the time of diagnosis through the balance of his or her life. Family members, friends, and care- givers are also impacted by the survivorship experience and are therefore included in this definition.

# The Role of Survivorship Care

- Focuses on the health and life of a person with a history of cancer beyond the acute diagnosis and treatment phase.
- Major transition period

- Disease surveillance
- Research, following outcomes
- Monitoring and management of late effects
- Health promotion activities (risk reduction)
- Coordination of care

# Cancer Surveillance

- Regular visits for possible treatment complications and relapse
- No study comparing schedules
- Recurrence risk depends on disease type, risk group, treatment received, time from treatment
- HL: 10-15% relapse early stage disease, up to 40% advanced stage; 70% within 2 yrs

# Cancer Surveillance

- DLBCL: 80% CR, 20% relapse
  - majority within 2 years, uncommon >5 yrs
  - majority of relapses are symptomatic, detected prior to a visit. Remainder mostly at visits
  - surveillance scans very rarely detect relapse
  - false positive scan results → anxiety, interventions
  - no survival advantage to detection with surveillance imaging vs at scheduled appointment
  - additional radiation associated with scans
  - ASH against routine surveillance imaging for curable lymphomas....esp. no PET

# What to Watch for

- What symptoms did the lymphoma cause originally?
- Lumps and bumps
- Pain (or other symptoms) that are uncommon and unexplained for you (and that don't go away)
- Persistent unexplained fever, drenching night sweats, weight loss (10% of body weight)

# Cancer Surveillance
*Curable Lymphomas*

- History
- Physical exam
- CBC
- Chemistry…kidney and liver, LDH
- Example:
  - Every 3 months year 1 & 2
  - Every 6 months to 5 years, longer with HL

# Cancer Surveillance

- Follicular NHL
  - same tests at visits
  - no role for surveillance PET scan
  - variable approach with CT scan
  - continuous follow up

Always biopsy area of suspected relapse

- risk of transformation to more aggressive disease with indolent lymphomas

# Late Complications of Therapy

- Chemo, antibody therapy, immune modulators, radiation, steroids…combinations
- Delayed toxicity can negatively impact QOL and survival
  - $2^{o}$ cancers
  - cardiovascular disease
  - infertility, gonadal dysfunction
  - thyroid dysfunction
  - psychological issues
  - impaired lung, kidney function
  - osteoporosis
  - cataracts

# Chemotherapy: Late Effects

Examples:

- Cyclophosphamide (Procytox or Cytoxan)
- Procarbazine (Matulane)
- Nitrogen mustard (Mustargen)
- Dacarbazine
- Doxorubicin (Adriamycin), daunorubicin
- Dexamethasone (Decadron)

# Secondary Cancers

Why do they develop?

- Chemo and radiation damage DNA in normal cells
- These may be become malignant
- Related to dose and age
- Cancer risk reduction, screening, prevention important

# Secondary Cancers

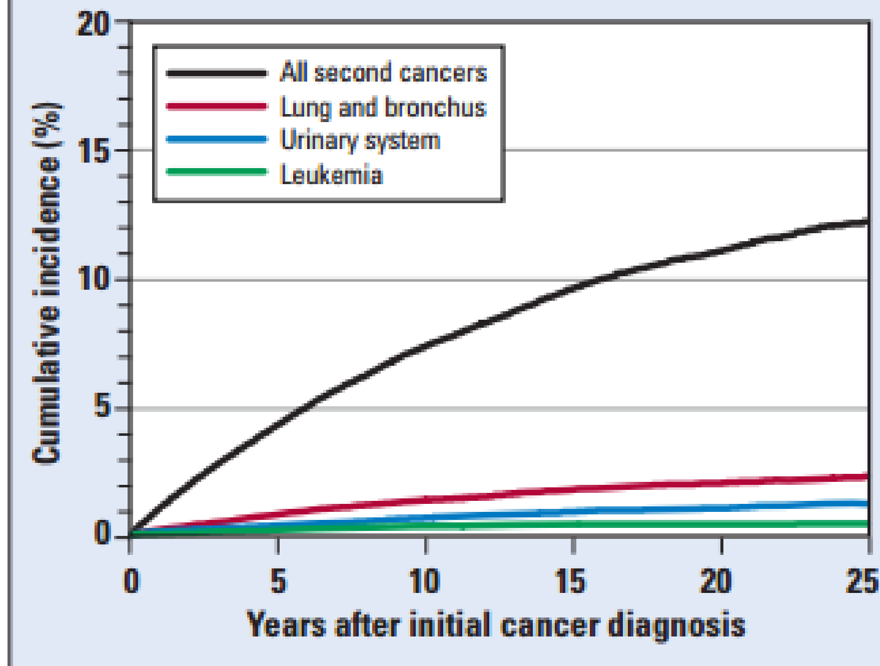
A secondary cancer is a new cancer that develops after treatment for the original cancer

- Increased risk for 25+ years after treatment

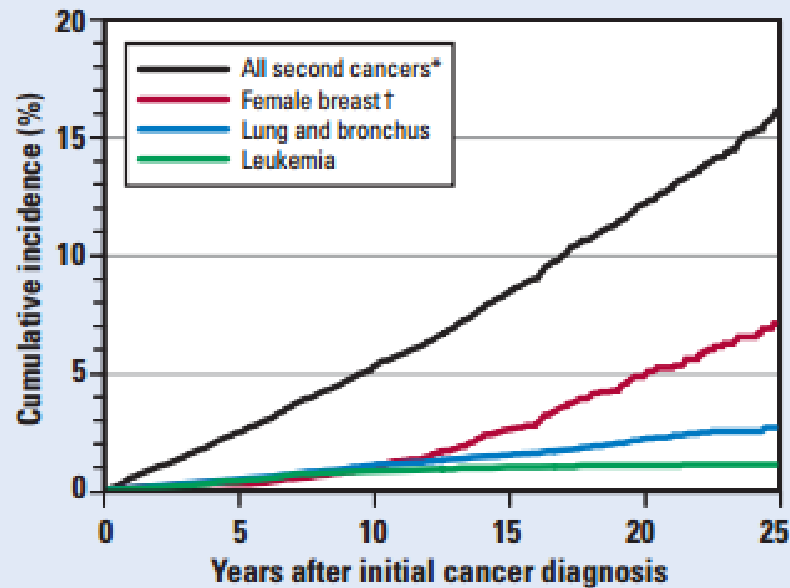
Common secondary cancers:

- Lung
- Brain
- Kidney
- Colon
- Skin
- Bladder
- Breast
- Melanoma
- Bone
- Stomach
- Other lymphomas
- Leukemia
- Thyroid

# NHL Secondary Cancers



# HL Secondary Cancers



# Secondary Cancers

<u>Post chemo:</u>

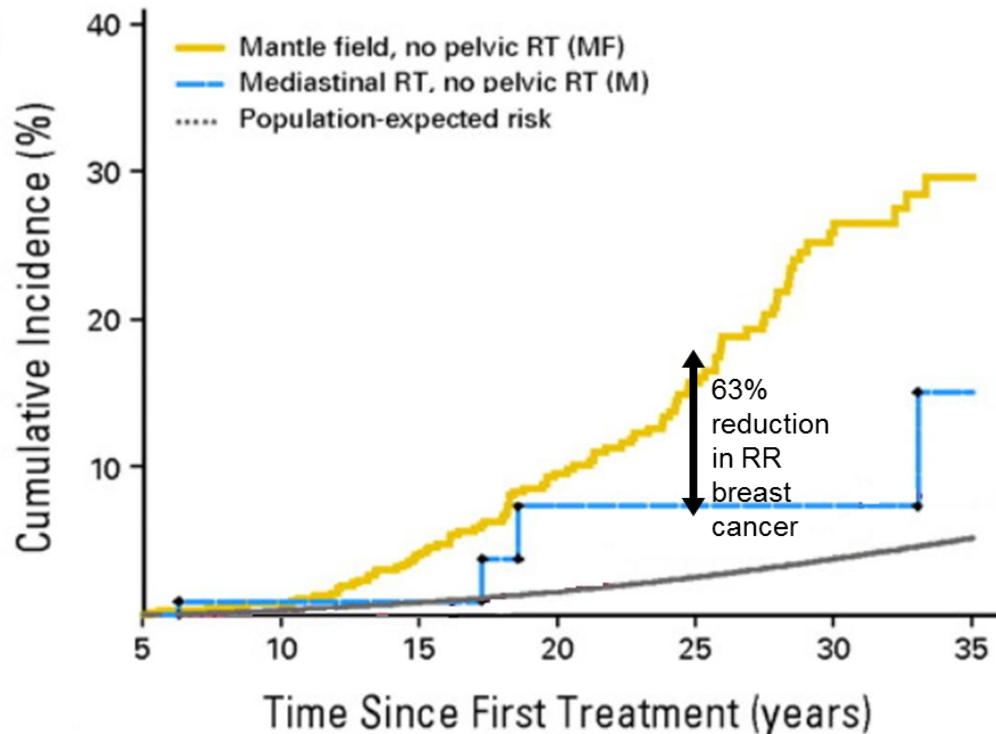
Leukemia risk rises about 2 years after treatment with alkylating agents, highest after 5 to 10 years, then declines

<u>Post radiation:</u>

- $2^{o}$ blood cancers develop within several years of radiation treatment, peaking at 5-9 years
- $2^{o}$ solid cancers not seen for at least 10 years after radiation, some >15 years
- Depends on dose and region treated
- Breast cancer in HL

# Implications for Transition to IFRT

*Clinical Evidence of Reduction in Breast Cancer Risk*




De Bruin M L et al. JCO 2009;27:4239-4246

# Screening for $2^0$ Cancers

- Routine age appropriate cancer surveillance
- Stop smoking
- Sun safety practice
- Annual pap test
- Annual mammography starting 8-10 years post mantle rads or age 40 (whichever is first)
- Breast MRI and mammo if rads before age 30
- chest Xray or ct scan of chest 5 years post mantle rads

# Chemo Induced Cardiac Complications

- Anthracycline (daunorubicin, doxorubicin) induced cardiomyopathy
- Risk factors:
  - Age >65
  - F > M
  - Prior diminished cardiac function
  - Hypertension
  - Smoking
  - Obesity
  - Hyperlipidemia
  - Diabetes
  - Total dose of chemo

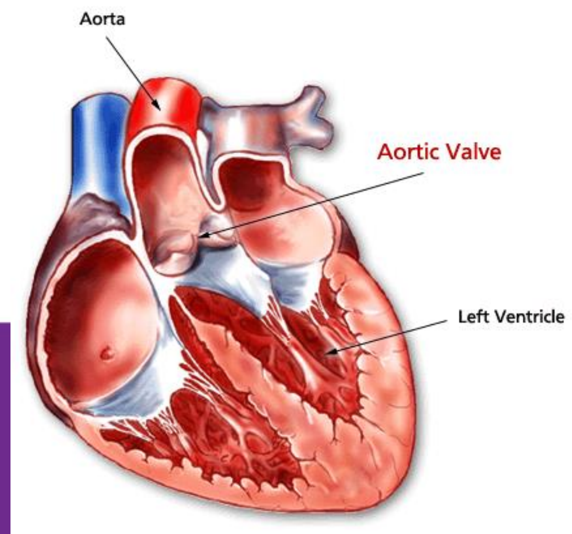
# Chemo Induced Cardiac Complications

- Impairs left ventricular function

  → <u>symptoms of heart failure</u>: fatigue, shortness of breath, leg edema, breathless lying flat

- Risk of heart failure 5.4X after 6 courses CHOP
- Symptomatic HF usually within 2-3 yrs
- Many more with left ventricular damage but without symptoms

  (low ejection fraction)



LYMPHOME CANADA

# Radiation induced cardiotoxicity

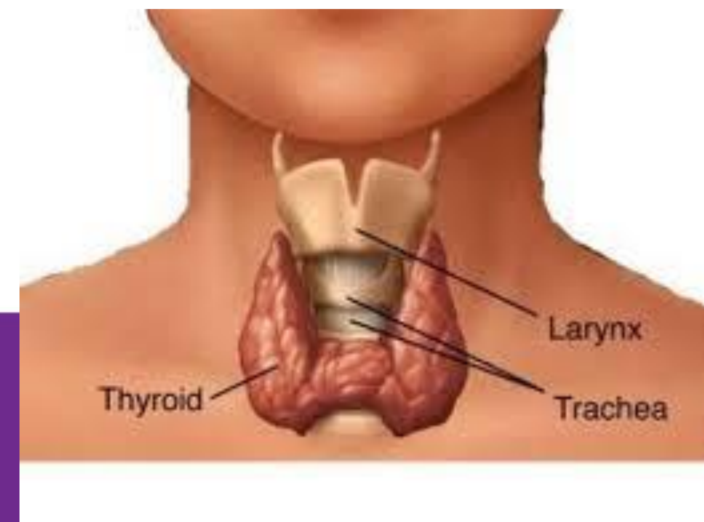
- Classically in setting of HL, mantle irradiation
- Pericardial disease, coronary artery disease, cardiomyopathy, heart failure, valvular damage, electrical conduction defects
- Risk factors:
  - Dose
  - Volume irradiated
  - Younger age
  - Cardiac risk factors
  - Anthacycline use (ABVD)

# Radiation induced cardiotoxicity

- 3-5x risk of coronary artery disease starting 10 yrs post to 25 yrs
- Valvular disease after 10 years
- Risk of heart failure at 25 yrs after rads and anthracycline for HL = 8%
- Cardiovascular disease most common non-malignant cause of death in long term HL survivors
- Stress testing, echocardiogram as early as 5-10 yrs post

# Endocrine Complications

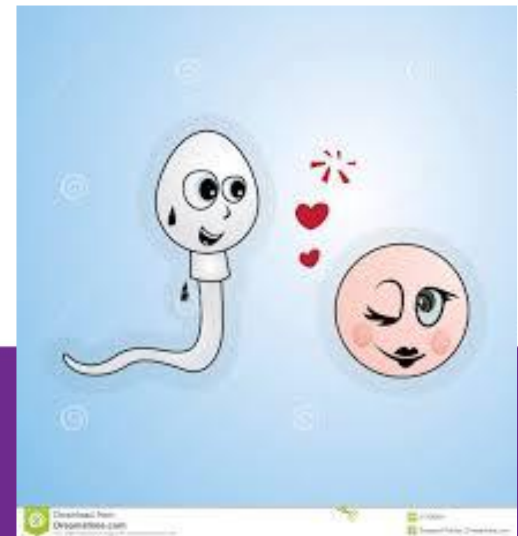
- Thyroid Gland
  - Radiation to neck/mediastinum
  - 30-60% develop dysfunction esp. hypothyroidism
  - Usually in first 5 yrs, even after 10 yrs
  - Follow TSH



LYMPHOME CANADA

# Endocrine Complications

- Gonadal dysfunction: sperm, eggs
  - Due to rads and/or chemo
  - CHOP/RCHOP/ABVD do NOT significantly effect fertility
  - MOPP, high dose chemo for SCT, multiple chemo regimens DO



LYMPHOME CANADA

# Psychological Issues

- Major concerns for cancer survivors
- Swedish study: mental health diagnoses and psychiatric meds prescribed increased from 1 year pre-cancer diagnosis to 10 yrs post

# Psychological Issues

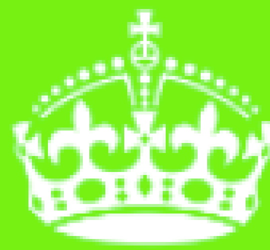
- Anxiety:
  - 18-25% of long term cancer survivors
  - jittery, restless, insomnia, impaired concentration
- Fear of recurrence:
  - common; patients and caregivers
  - days/weeks prior to regular surveillance visits
- Post traumatic stress:
  - underdiagnosed in cancer patients often due to avoidant coping
  - nightmares, reliving
- Cancer related distress:
  - due to heightened awareness of uncertainties of life
  - concerns about family/finances
  - hypervigilant about symptoms
  - change in self perceptions and body image

# Psychological Issues

- Depression:
  - Impairs QOL, associated with increased risk of death
- Sexual dysfunction
  - Intimacy, body image, desire, arousal, orgasm, satisfaction
  - 66% report impaired sexual functioning; 30% sought care
- Survivor guilt
  - Sense of having done something wrong or owing a debt that can never be paid as a result of having survived

# Recommendations

- Manage cardiovascular risk factors
- Consume a healthy diet
- Limit alcohol consumption
- Physically active lifestyle
- Use sunscreen, avoid tanning beds
- Quit smoking
- Undergo screening as directed



KEEP
CALM
AND
FIGHT
LYMPHOMA