



# Blood Day for Primary Care

## Investigation of Lymphadenopathy Suspicious for Lymphoma

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# Disclosures

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## **Pam Skrabek**

How do I investigate of lymphadenopathy suspicious for lymphoma?

## **FINANCIAL DISCLOSURE**

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**Other:** none to disclose



# Objectives

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1. Identify patient findings that should prompt suspicion of lymphoma
2. To present a diagnostic approach to suspicious lymphadenopathy
3. Understand when during the diagnostic process to send a referral to CancerCare Manitoba and what accompanying information is required to facilitate prioritization and appointment scheduling



# Introduction

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- Lymphoma is the 5<sup>th</sup> most common cancer
- Five year survival rates high
  - 70% Non-Hodgkin Lymphoma (NHL), 85% (Hodgkin Lymphoma (HL))
- Time to diagnosis longer than other cancers
- Primary Care likely to diagnose one person with NHL every 2-3 years and one HL in career<sup>1</sup>

1. Cancer, N. C. C. f. (2014). Suspected Cancer: recognition and management of suspected cancer in children, young people and adults National Institute for Health and Care Excellence



## Interactive question

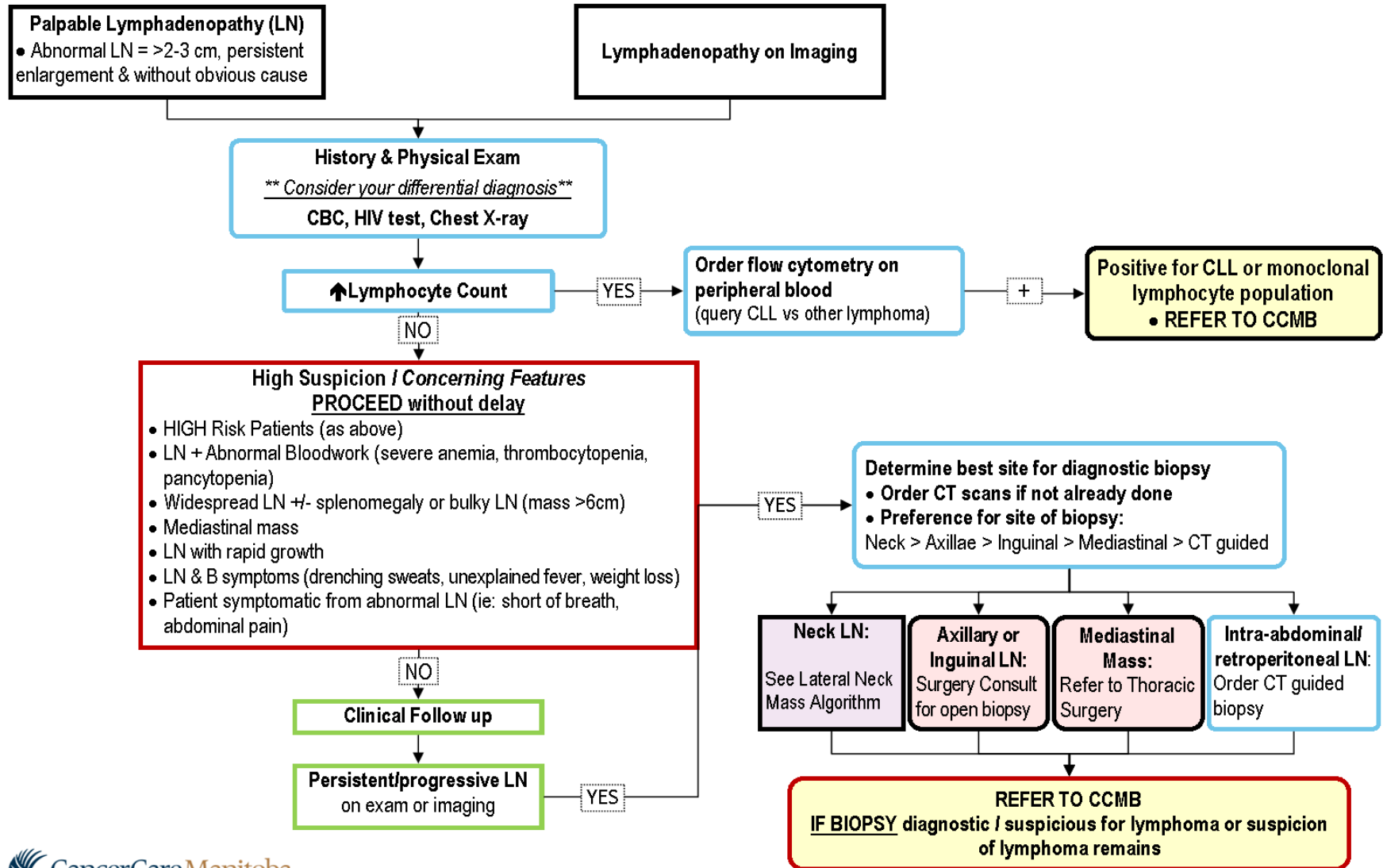
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1. You are seeing a 60 y.o. male for routine physical exam and find multiple palpable neck LN with the largest being ~ 2.5 cm. Assuming this mass is malignant what proportion do you expect to be lymphoma?
  - a) 15%
  - b) 25%
  - c) 50%
  - d) 75%

# Work-Up of LYMPHADENOPATHY Suspicious for LYMPHOMA

**RISK FACTORS:** HIGH risk: immune deficiency (ie. HIV or organ transplant), autoimmune disease +/- immune suppressing medications, and history of lymphoma

**PRACTICE POINTS:** *\*\*Consider your differential diagnosis\*\** including reactive LN due to infection/inflammation, metastatic malignancy, and autoimmune disease.





RISK	STRENGTH ASSOCIATION
AGE	↑↑↑
MALE SEX	↑
FAMILIAL HISTORY & GENETIC SUSCEPTIBILITY	↑
IMMUNE SUPPRESSION	↑↑↑
AUTOIMMUNE DISEASE	↑↑↑
INFECTIONS	↑↑↑
OCCUPATIONAL ENVIRONMENTAL	↑
LIFESTYLE	↑

# Lymphoma Risk Factors

## Key

↑↑↑ RR > 5

↑ RR > 1





# Suspicion of Lymphoma

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- **Lymphadenopathy (LN) most common presentation NHL and HL**
  - **May be found incidentally (~ 30%)**

## Palpable Lymph nodes

- Most peripheral LN is benign....What makes LN “suspicious”
  - Size (> 2 cm), supraclavicular location, firm, painless
  - Symptoms/ findings along with LN may be what prompts suspicion





# Suspicion of Lymphoma

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## Lymphadenopathy on Imaging

- Palpable LN
  - Abdominal complaints common in NHL
  - Abnormal chest x ray
  - B symptoms
  - Imaging done for other reasons
- 
- How likely does the LN represent Lymphoma?



# Approach to Lymphadenopathy

HISTORY & PHYSICAL EXAM

**\*\* Consider your differential diagnosis\*\***

- Examine all LN group
  - Size, consistency, fixation, rapidity of growth
  - Local cause
    - Infectious, Malignant (head & neck cancer, breast cancer)
- Other lymphatic structures
  - Waldeyer ring, Liver, Spleen

**CBC, Chest X-ray**



# Generalized Lymphadenopathy

## DIFFERENTIAL DIAGNOSIS

- Infections – HIV, EBV, CMV, TB (generally localized), etc
- Neoplasm – lymphoma, leukemia
- Drugs
- Immune – SLE, RA, sarcoid



# High Suspicion of Lymphoma

## CONCERNING FEATURES

### HIGH Risk Patients

LN + Abnormal Bloodwork (severe anemia, thrombocytopenia, pancytopenia)

Widespread LN +/- splenomegaly or bulky LN (mass >6cm)

Mediastinal mass

LN with rapid growth

LN & B symptoms (drenching sweats, unexplained fever, weight loss)

Patient symptomatic from abnormal LN (ie: short of breath, abdominal pain)

- NO Concerning features close clinical follow up
  - Persistent LN (>4 weeks) proceed with investigation



# Referral to Hematology

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## C A S E 1

Thank you for seeing [REDACTED], a 60 year old male patient.  
Seen April 28, 2014 - more rapid heart rate than usual - upper chest pressure - persistent cough. Chest x-ray ordered. A mass within the anterior superior mediastinum was seen and further evaluation with cross sectional imaging advised.

CT chest was done May 29/14 - it reported grossly enlarged anterior/middle/posterior mediastinal lymph nodes with soft tissue nodularity to the right pleura and bilateral pleural effusions. Lymphoma is the diagnosis of exclusion. The mediastinal soft tissue mass/nodes would likely be amenable to biopsy via mediastinoscopy if clinically indicated. Approx. 4-6mm nonspecific pulmonary nodule in the left lower lobe.

### **On following meds:**

crestor , metoprolol 25mg bid , avodart , ranitidine 150mg bid

### **Allergies**

No Allergies recorded



# Investigations

## SUSPECTED LYMPHOMA

- *History & Exam, CBC, Chest X-ray*
- electrolytes, urea/Cr, AST, ALT, Alk Phos, GGT, bilirubin, Ca, albumin, LDH, uric acid
- SPEP, HIV
- **LYMPH NODE BIOPSY**
- CT neck/chest/abdomen/pelvis



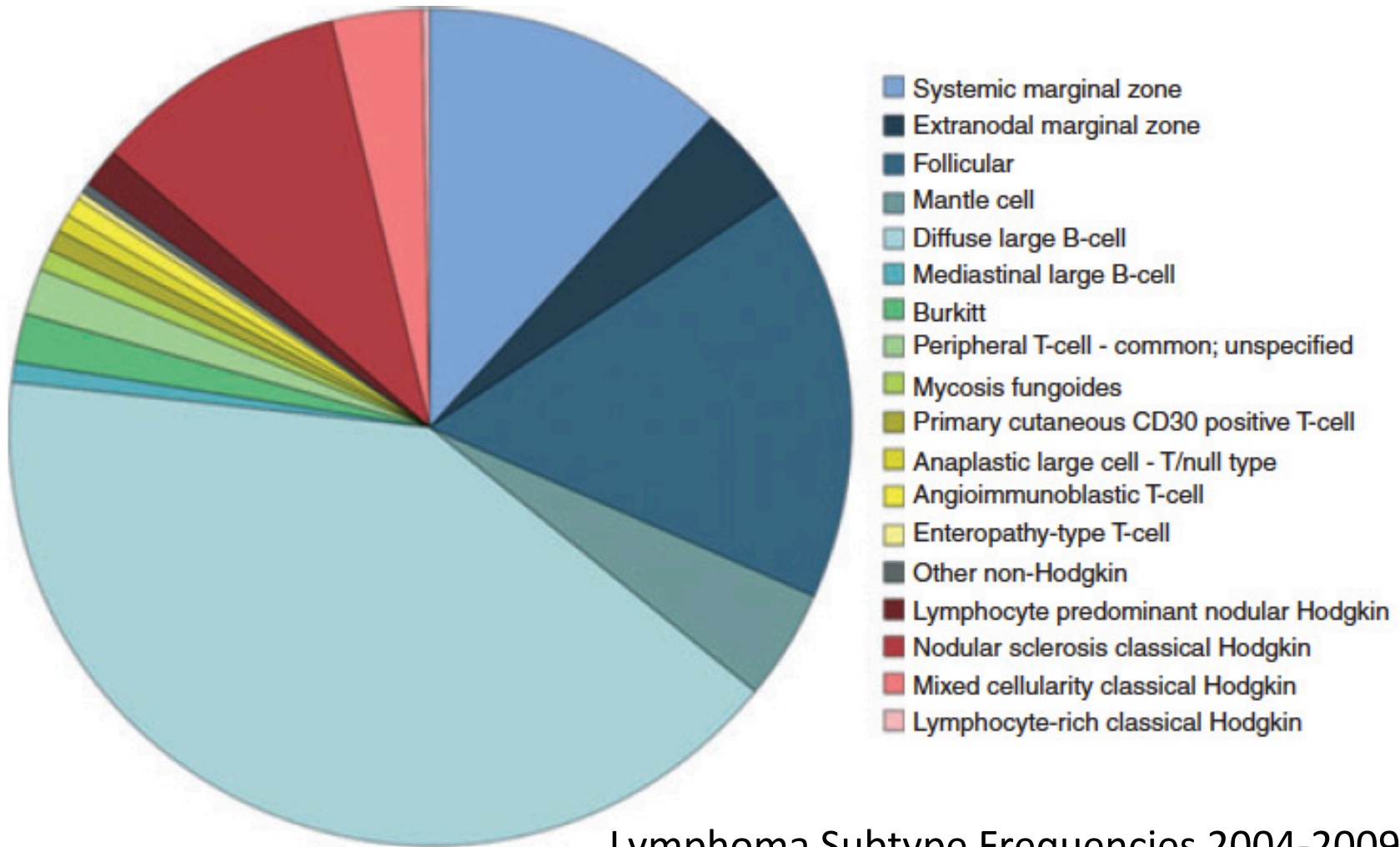


# Diagnosis of Lymphoma

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## BIOPSY TYPES

- FNA – exclusion metastatic carcinoma, **can not be used for definitive diagnosis**
- Core biopsy – if no easily accessible node
- Excisional/incisional LN biopsy always preferred
  - Diagnostic yield greater if LN > 2cm  
SC>cervical = axillary> inguinal



Lymphoma Subtype Frequencies 2004-2009  
Haematological Malignancy Research Network



## When to refer to hematology

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- Biopsy with lymphoma or suspicious of lymphoma
- **High Suspicion / Concerning features** – send consult early in process, call if you are worried about patient
- INCLUDE: physical exam & note regarding symptoms, CBC, lytes, urea/Cr, LD, Calcium, albumin, chest x-ray
- ORDER: CT neck/chest/abd/pelvis (Do not wait for results, just send the requisition and let us know its ordered)



# Referral to Hematology

## CASE 2

Thank you for seeing [REDACTED], a 31 year old female patient. She initially felt pain along her left lower breast approximately 2 years ago. The discomfort was fairly stable but more recently it has been increasing in intensity and she states it is particularly bad when her child gives her a hug. She has also had a fullness over her left supraclavicular region for many years, and according to [REDACTED], it has not increased in size but does tend to swell and remit from time to time and is intermittently tender. A CXR was normal. A chest CT demonstrated diffuse lymphadenopathy and splenomegaly, and lymphoma is the most concerning diagnosis to rule out. She does endorse fatigue and feeling "hot" at night. She denies weight loss and she is quite obese.

### Physical exam:

H&N: She does have a fullness over the left supraclavicular region but no discrete node is appreciated.

Chest- clear, no adventia

CV: S1/S2, no S3/S4, no murmur

ABDO: no masses appreciated, although exam limited d/t body habitus

Breasts: no masses, no axillary nodes

Groin: no nodes appreciated

PVS: no edema, pulses present b/l



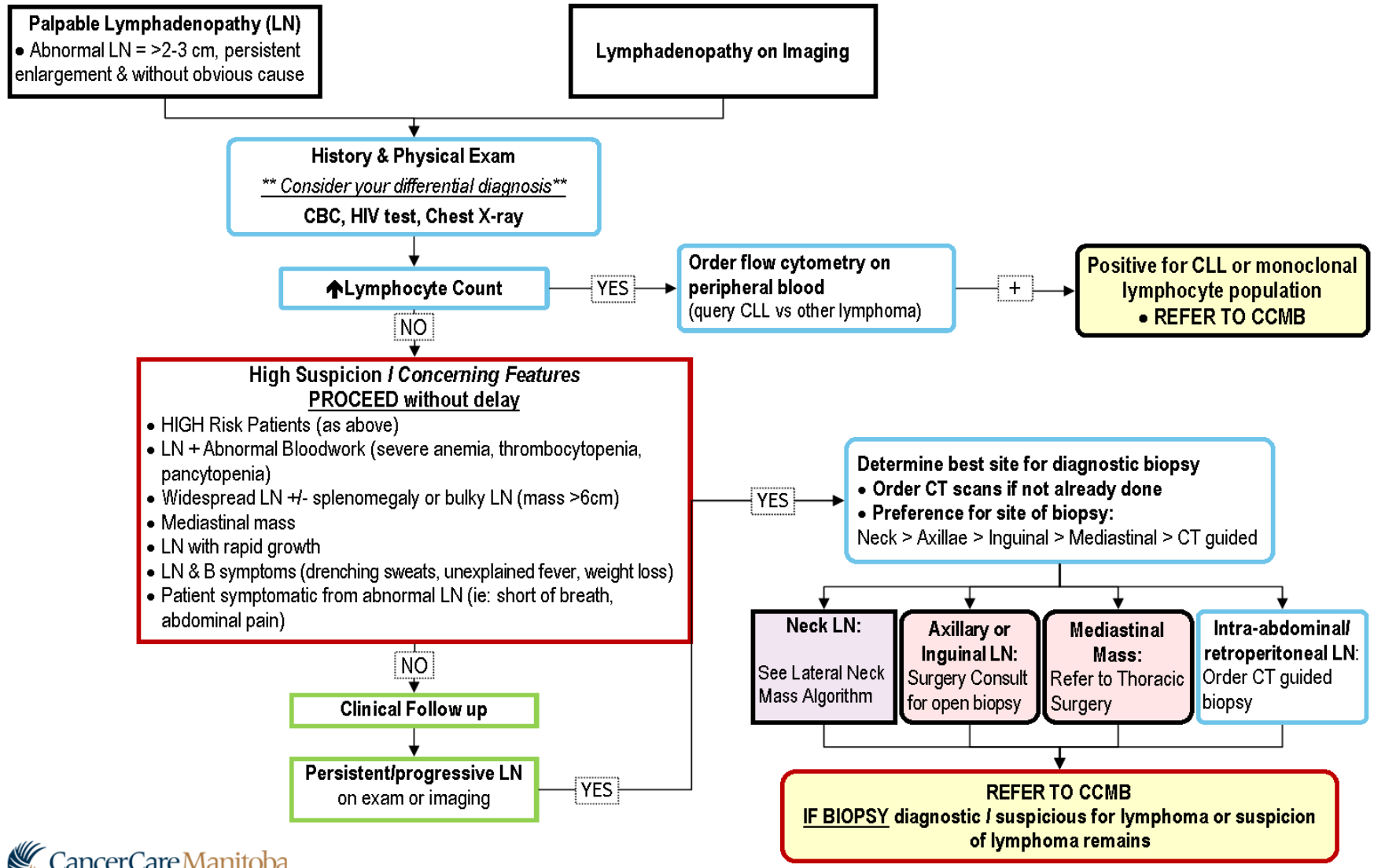
## Process when referral is received

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- Reviewed by Triaging MD
- If no definitive diagnosis refer for biopsy
- Order labs & imaging, prioritize and assign

# Work-Up of LYMPHADENOPATHY Suspicious for LYMPHOMA

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## Take Home Messages

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- Main presentation of lymphoma is lymphadenopathy
- Presentation variable due to different types of lymphoma
- Patients high suspicion proceed with referral for diagnostic biopsy & to CCMB early



Questions?

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## APPROACH TO AN ADULT WITH A LATERAL NECK MASS

