

# **PAIN IN THE NECK**

**NNAMDI UDEH**

**RADIOLOGY PATHOLOGY CORRELATION**

**NOV 3, 2017**



# **HISTORY AND PHYSICAL**

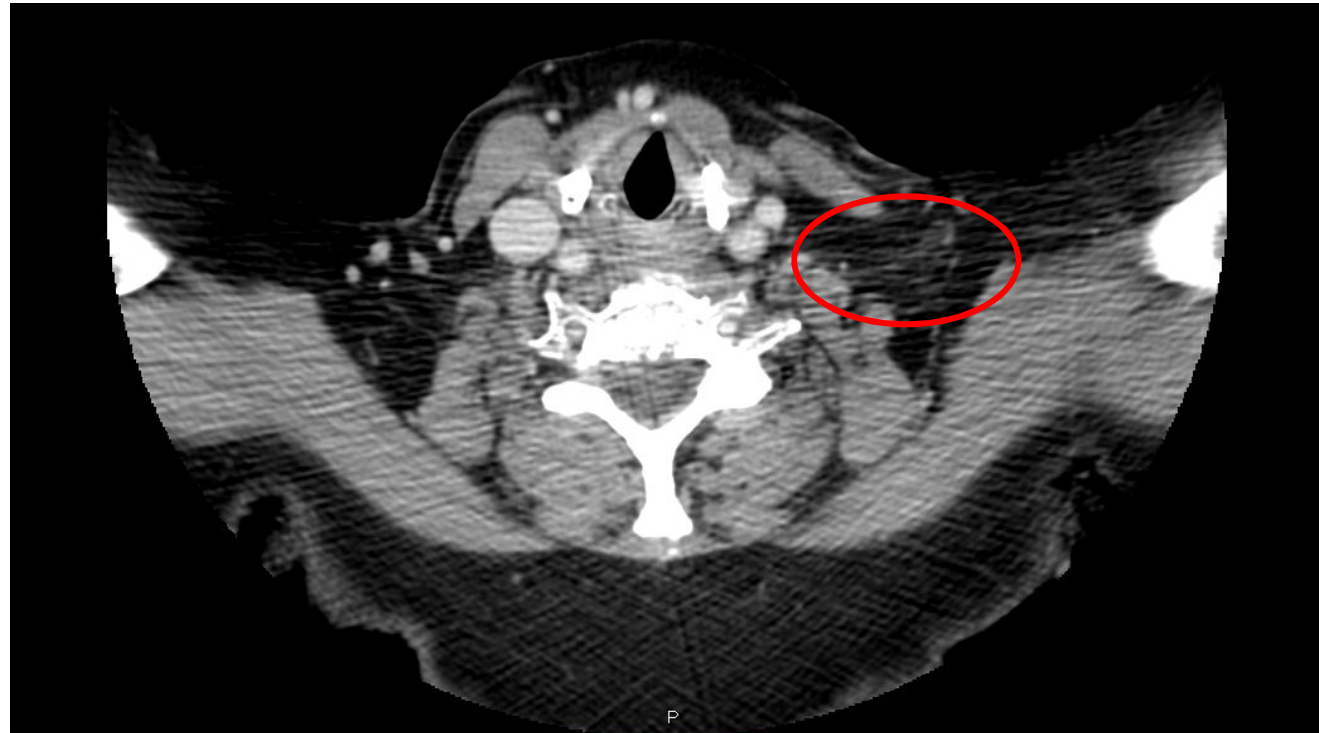
- **82 yo F with PMH of tobacco use c/b COPD and COP, abdominal aortic aneurysm, and marginal zone lymphoma (diagnosed in 2011 s/p chemotherapy completed 2013)**
- **Persistent L neck pain and feeling of fullness in L supraclavicular fossa w/o evidence of cervical LAD**
- **Exam significant for cervical kyphosis, otherwise wnl**
- **Labs reveal reduced RBC count, reduced lymphocytes, and low-normal to reduced IgM with normal LDH**
- **Prior CTs of neck read as no cervical LAD or recurrence**

# PRIOR IMAGING

CT from 10/2014

Indication:  
recurrence of  
night sweats w/  
h/o lymphoma

Findings: No  
pathologic  
adenopathy within  
the cervical soft  
tissues.

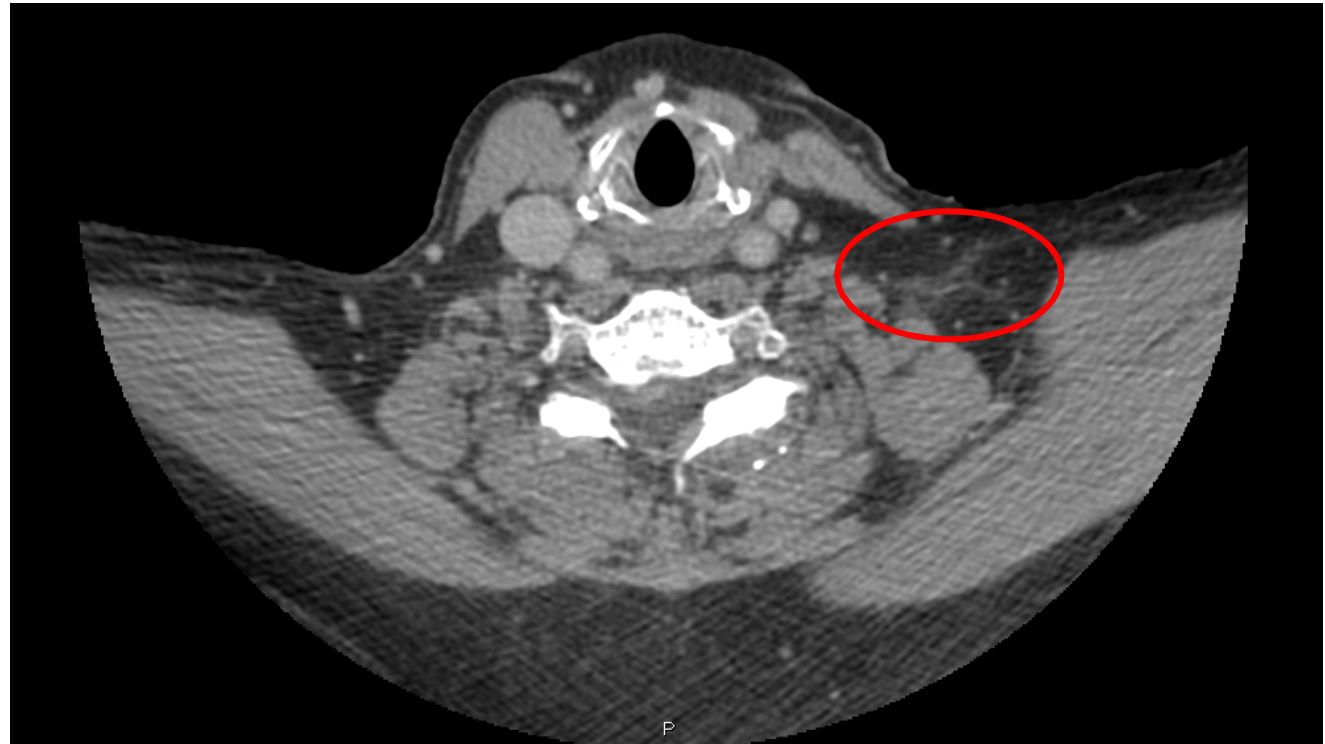


# PRIOR IMAGING

## CT from 10/2015

Indication: h/o lymphoma, night sweats, r/o progression

Findings: No recurrence. No cervical lymphadenopathy.

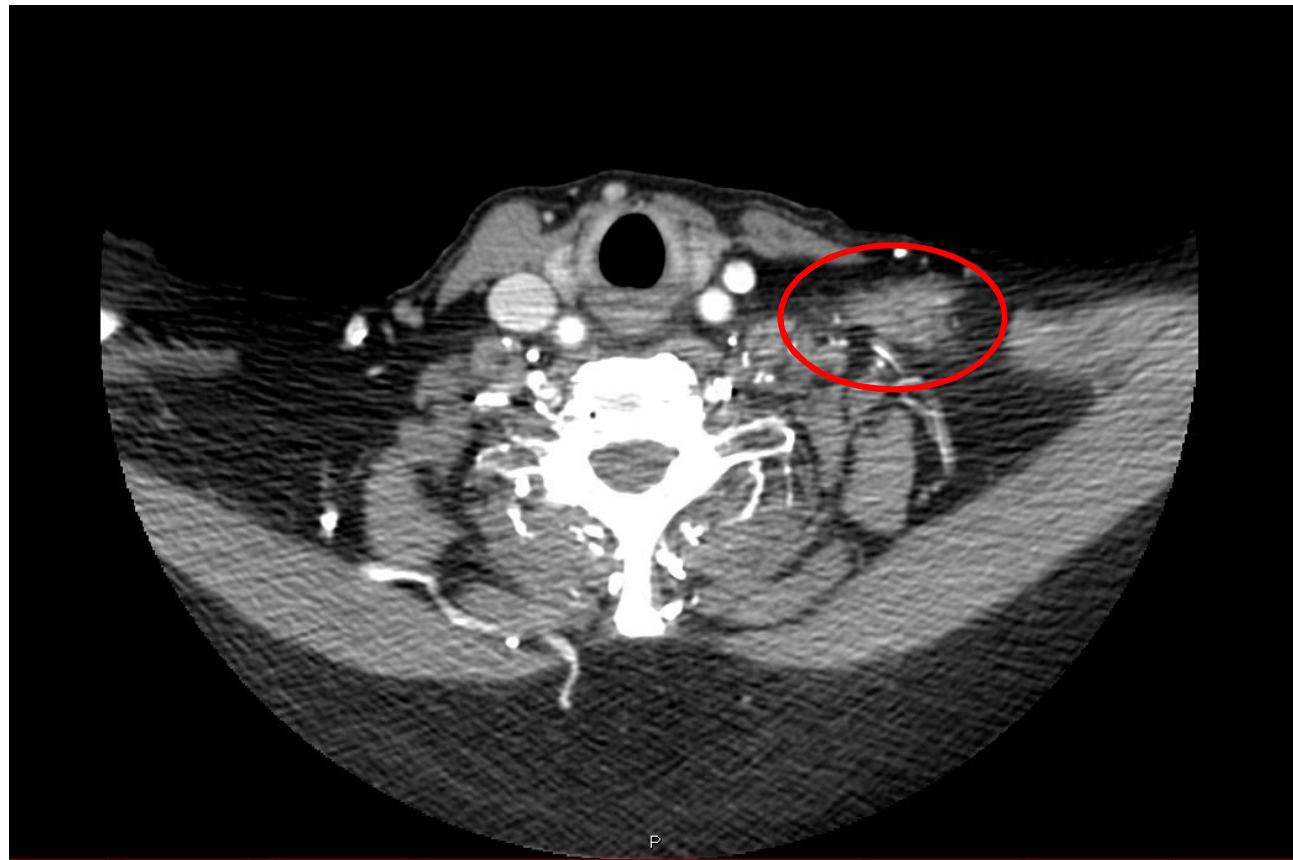


# PRIOR IMAGING

CT from  
10/13/2017

Indication:  
persistent L neck  
pain under  
mandible, fullness  
in L supraclavicular  
fossa, r/o  
adenopathy

Findings:  
Significant interval  
increase in  
infiltrative left  
lateral neck soft  
tissue since 2015,  
suspicious for  
recurrent  
lymphoma



# PLAN

- **Ultrasound-guided needle biopsy with FNAs for cytology and flow cytometry and cores for staging**
  - US chosen because of relatively superficial lesion
  - More comfortable for patient, no radiation, and easier to position for tissue sampling
- **Screening CTs of chest/abdomen/pelvis showed increased size in pulmonary nodules, c/f low-grade primary non-small cell carcinoma, not amenable to biopsy**

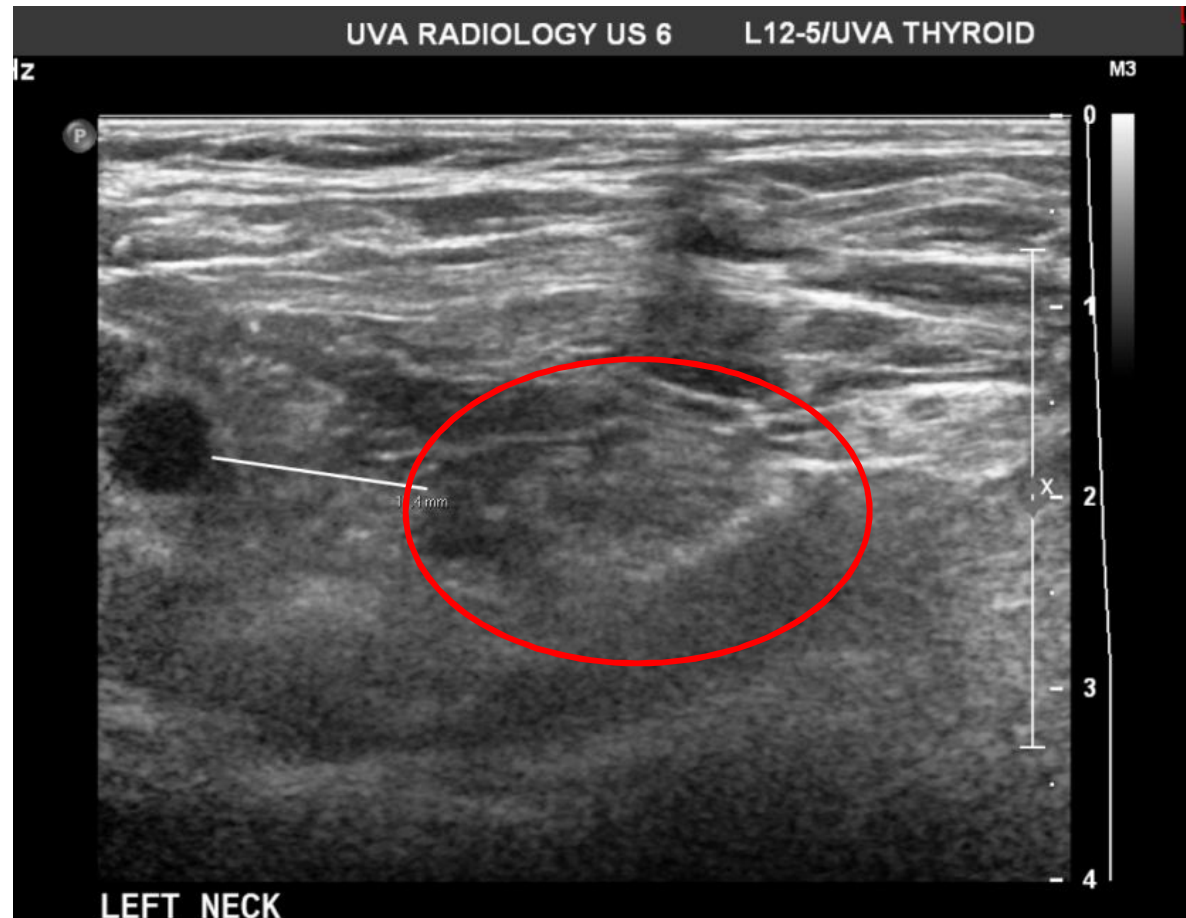
# **DIFFERENTIAL DIAGNOSIS**

- **Local recurrence of marginal zone lymphoma**
- **Reactive lymph node**
- **Lymph node metastasis from new primary lung lesion**
- **Contusion/mechanical injury with soft tissue edema**
- **Scar from previous cervical nodal disease**

# PROCEDURE

## Approached with ultrasound initially

- “Ultrasound of left cervical region without clear delineation of the mass requiring biopsy”
- Decision made to move to CT for better tissue detail





# PROCEDURE



# PATHOLOGY

- **Initial FNAs were deemed to have adequate tissue for cytology**
  - Lymphocytes were present on FNAs, indicating lymphoid origin of lesion
  - Morphology consistent with atypical lymphocytes
- **Flow cytometry revealed monotypic kappa-restricted B-cell population, negative for CD5 and CD10**
  - B-cell by high expression of CD19 and CD20
  - Lack of CD5/CD10 coexpression common in marginal zone lymphomas<sup>1</sup>
  - Kappa:lambda ratio of 77:1 indicates monoclonal, monotypic cell population<sup>2</sup>

# DIAGNOSIS AND PROGNOSIS

**Patient's history, imaging, and pathologic findings are all consistent with a recurrence of nodal marginal zone B-cell lymphoma**

- 5-year survival for all MZL (nodal, splenic, and MALT) is 86%<sup>3</sup>
- 5-year survival for nodal MZL is 79%

# REFERENCES

1. van den Brand, M., & van Krieken, J. H. (2013). **Recognizing nodal marginal zone lymphoma: recent advances and pitfalls. A systematic review.** *Haematologica*, 98(7), 1003-1013. doi:10.3324/haematol.2012.083386
2. Marti, G. E., Rawstron, A. C., Ghia, P., Hillmen, P., Houlston, R. S., Kay, N., . . . International Familial, C. L. L. C. (2005). **Diagnostic criteria for monoclonal B-cell lymphocytosis.** *Br J Haematol*, 130(3), 325-332. doi:10.1111/j.1365-2141.2005.05550.x
3. Olszewski, A. J., & Castillo, J. J. (2013). **Survival of patients with marginal zone lymphoma: analysis of the Surveillance, Epidemiology, and End Results database.** *Cancer*, 119(3), 629-638. doi:10.1002/cncr.27773