LYMPHOMA CASE REPORT

Samantha Epstein

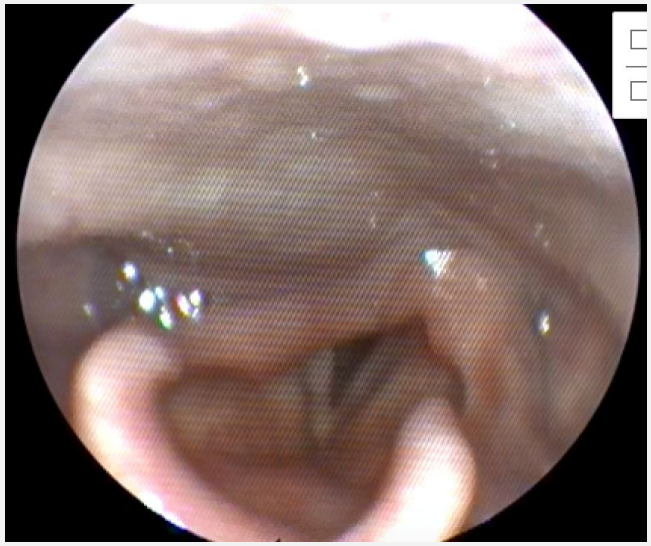
Radiology and Pathology Correlation

CLINICAL PRESENTATION

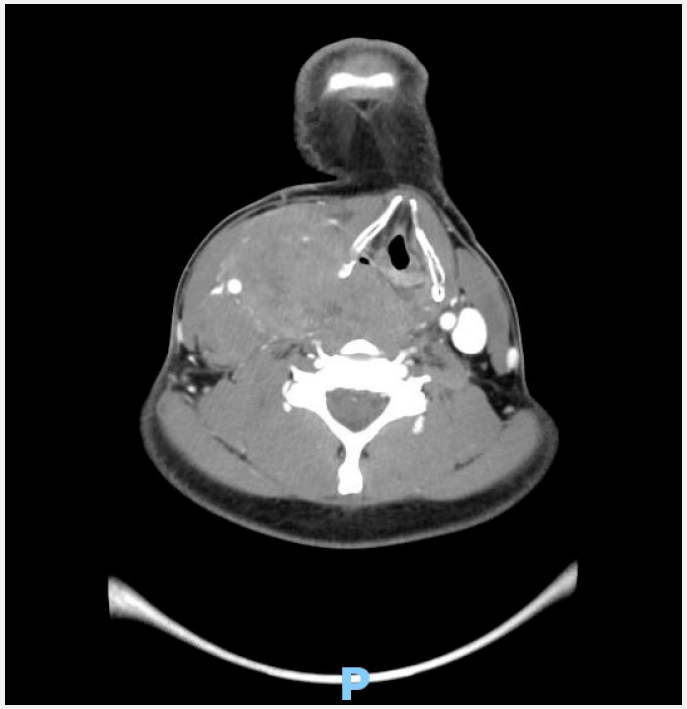
- CC: 38 yo M presenting with rapidly growing right neck mass
- HPI: First noticed about a month ago, presented to OSH with hematemesis and melena
  - OSH CT scan showed neck mass, labs showed hypothyroidism
  - Started on levothyroxine, omeprazole, and famotidine
  - Mood and lethargy improved, no further bleeding
  - Now having difficulty swallowing and breathing
- PMH: Hypothyroidism
- Soc Hx: smoker, ETOH abuse

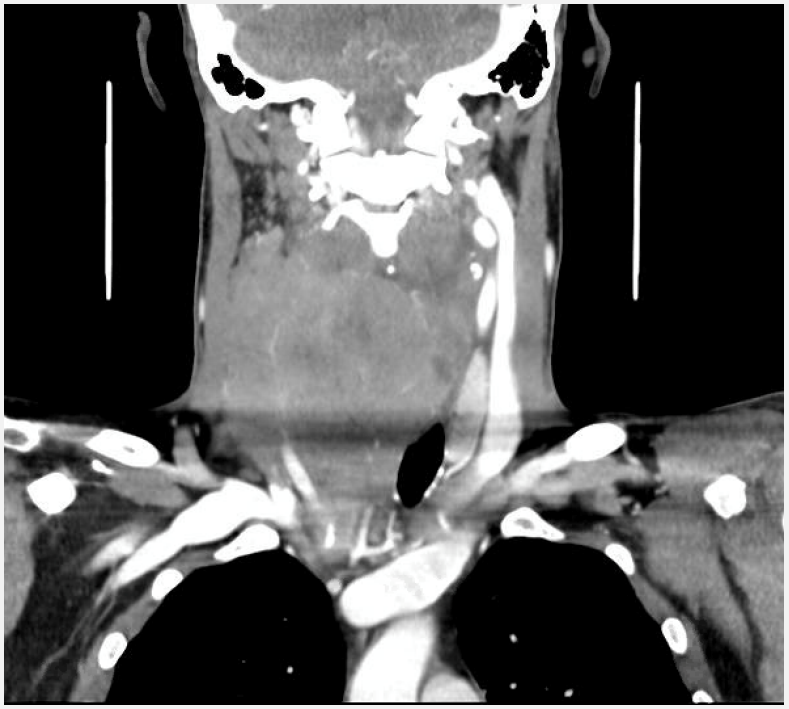
CLINICAL PRESENTATION

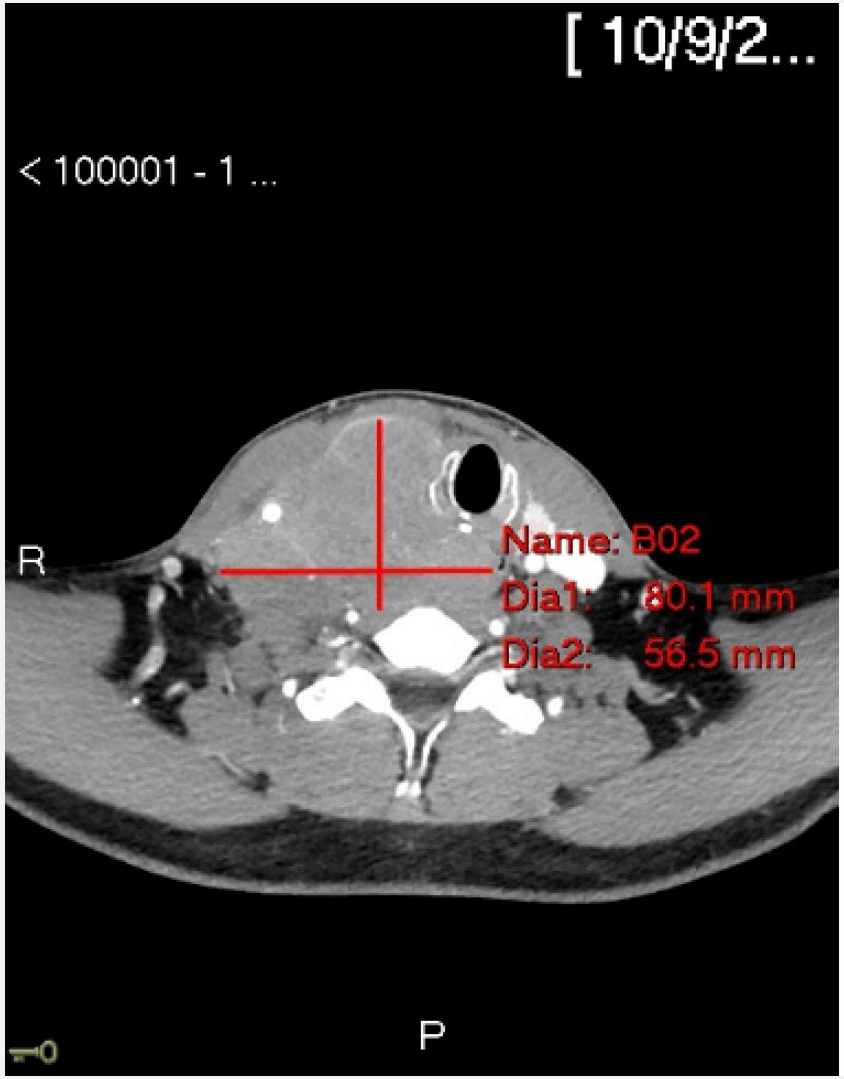
- Physical: VSS, right neck mass, strained voice, no other LAD
- Labs: Macrocytic anemia, elevated TSH with normal T4, elevated LDH
- Flexible laryngoscopy: Mass effect with glottis and trachea displacement



IMAGING



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Dia1: 80.1 mm
Dia2: 56.5 mm
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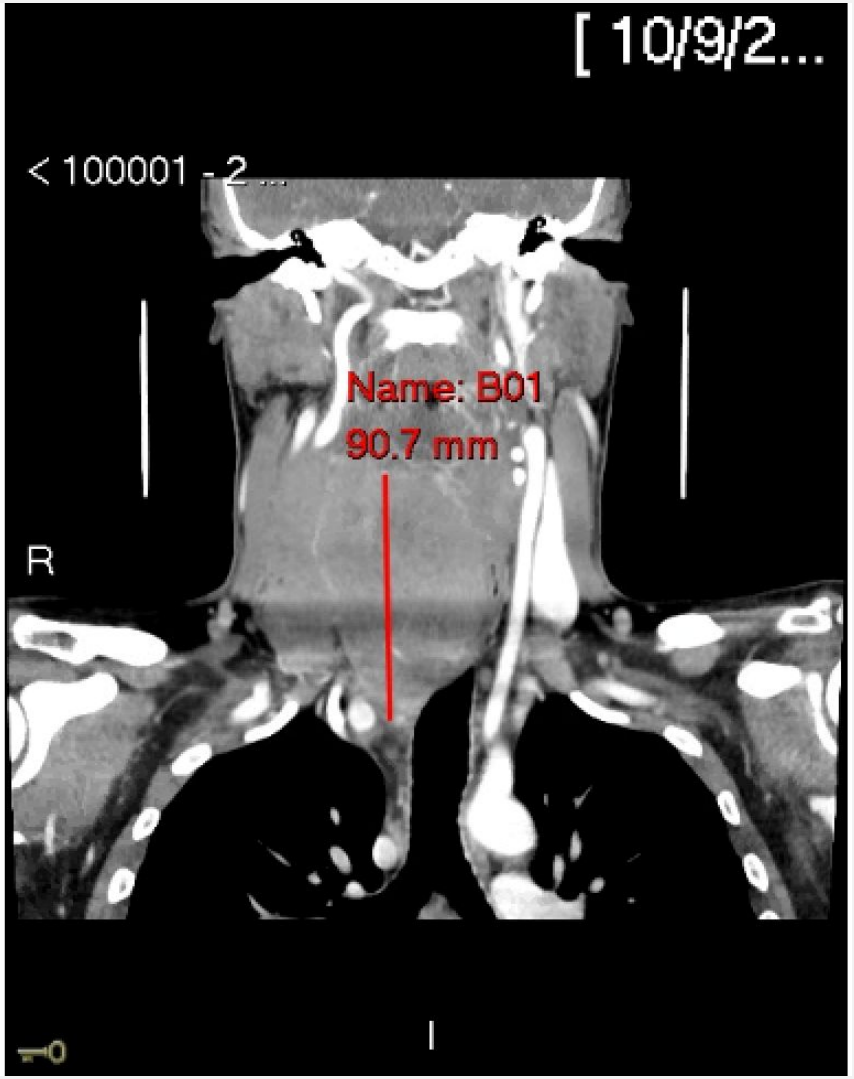
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Name: B01
90.7 mm
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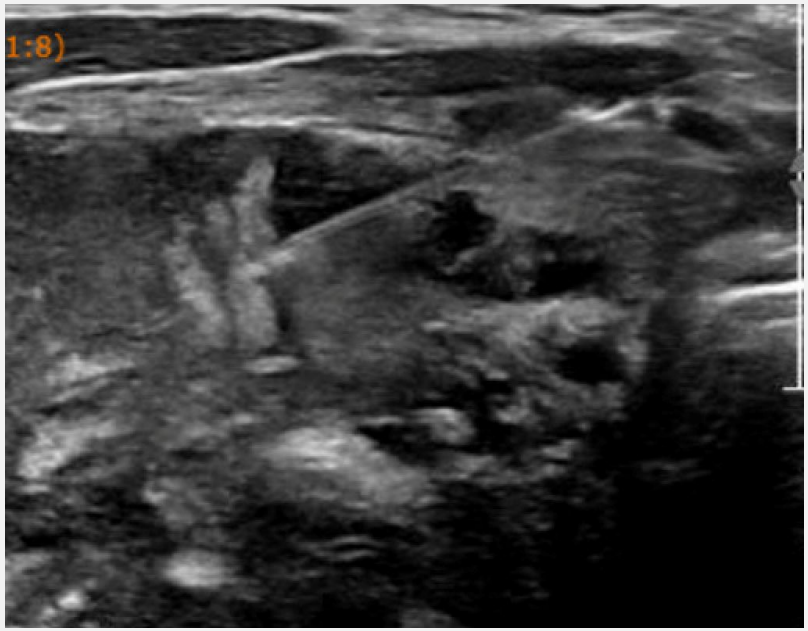
I

PROCEDURE

- US-guided FNA: 22 gauge-3.5 inch FNAs x2
- Cytopathologic evaluation of the FNA demonstrated adequate cellular material but was insufficient for definitive characterization
- Core biopsy was requested: Temno evolution 20 gauge-6 cm core biopsies x3



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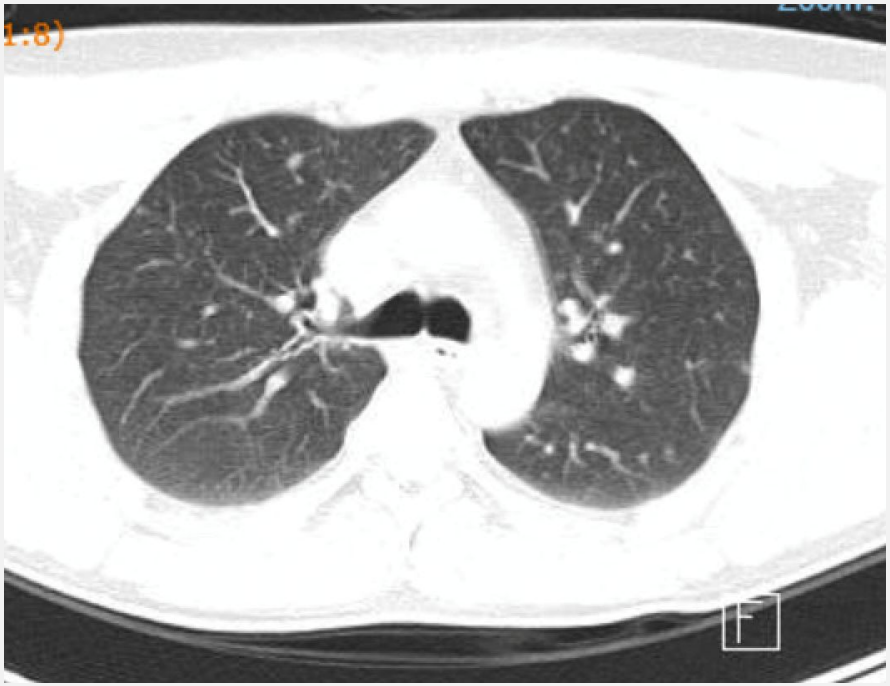

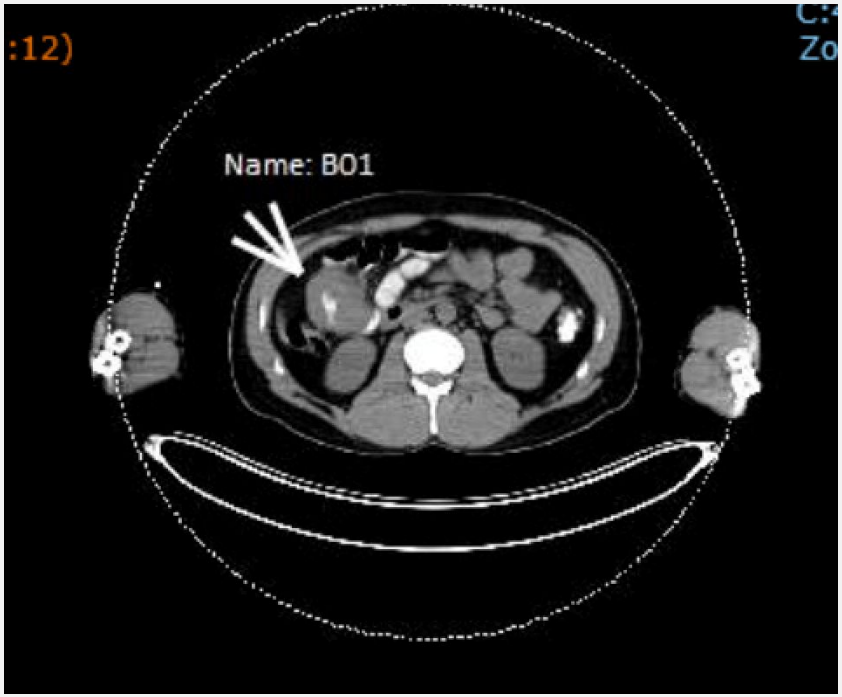

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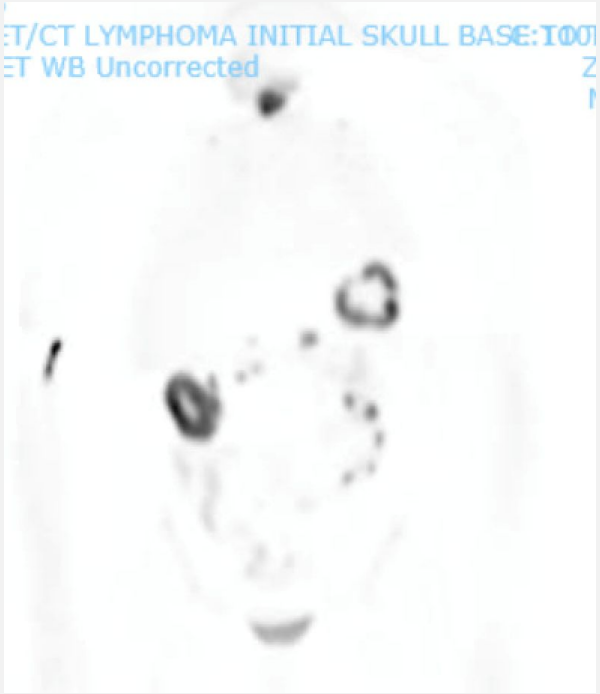
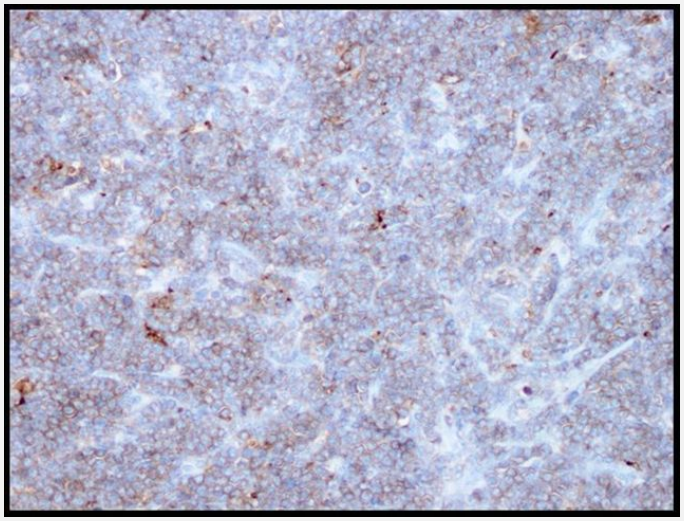


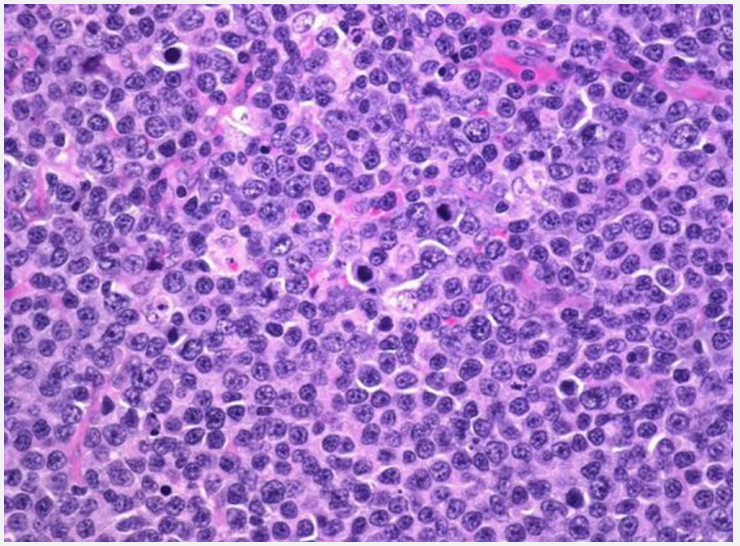
PATHOLOGY

- Flow cytometry: ***MONOTYPIC KAPPA RESTRICTED B-CELL POPULATION POSITIVE FOR CD10***
- Final biopsy report is still pending; however, the morphology of the sample and present immunohistochemistry/cytogenetics are most consistent with Burkitt's lymphoma vs high-grade B-cell lymphoma
- PET-CT with evidence of lung and GI metastases consistent with stage IV disease.



BURKITT'S LYMPHOMA

- Commonly caused by (8,14) translocation
  - Increased expression of c-myc
  - Also associated with EBV infection
- "Starry sky" appearance
  - Benign histiocytes that have ingested apoptotic tumor cells
  - Usually CD20 positive
- Short tumor doubling time (25 hours)



TREATMENT

- Steroids with 125 mg IV solumedrol
  - TLS labs and accuchecks q6h in setting of steroid administration
  - IV hydration
- Aggressive chemotherapy regimen with Magrath regimen (CODOX-M/IVAC) while inpatient
  - Cyclophosphamide, vincristine, doxorubicin, high-dose methotrexate/ifosfamide, etoposide, and high-dose cytarabine
- LP with delivery of intrathecal prophylactic chemotherapy (cytarabine and methotrexate)

PROGNOSIS

- A majority of patients may be cured with aggressive treatment regimens
  - In children, the prognosis is good with survival rates >90%
  - In adults, the prognosis is poorer, with a 5-year survival rate of ~50%
  - Worse prognosis with bone marrow or CNS involvement (>30% 5-year survival rate)
- Prospective clinical trials using modern regimens report two-year survival rates of 80-90%
- Outside of a clinical trial, patients with refractory disease and those who relapse after an initial response to appropriate initial therapy have an extremely poor prognosis

REFERENCES

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