

# AJCC Staging Moments

AJCC TNM Staging 8th Edition

Glottic Larynx Case #1



# AJCC

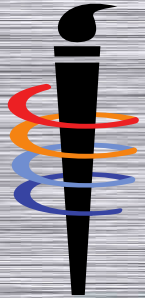
**American Joint Committee on Cancer**

Validating science. Improving patient care.

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# Larynx Case # 1

## Presentation of New Case

- Newly diagnosed larynx cancer patient
- Presentation at Cancer Conference for treatment recommendations and clinical staging



# Larynx Case # 1

## History & Physical

- 63 yr old female who presented with a raspy voice, no palpable lymphadenopathy
- No smoking hx
- No family history of ca



# Larynx Case # 1

## Imaging & Endoscopy Results

- CT neck
  - Left vocal cord lesion
  - No regional nodes involved
  - No paraglottic extension or cartilage destruction
- CT chest
  - Negative
- Laryngoscopy & biopsy
  - 1cm lesion involving left vocal cord and possibly extending to anterior commissure
  - Normal cord mobility



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# Larynx Case # 1

## Diagnostic Procedure

- Procedure
  - Biopsy left vocal cord during laryngoscopy with operating microscope
- Pathology Report
  - Well differentiated squamous cell ca
  - Grade 1
- HPV status is negative



# Larynx Case # 1

## Clinical Staging

- Clinical staging
  - Uses information from the physical exam, imaging, and diagnostic biopsy
- Purpose
  - Select appropriate treatment
  - Estimate prognosis



# Larynx Case # 1

## Clinical Staging

- Synopsis: patient with small lesion on left vocal cord, clinically negative lymph nodes
- What is the clinical stage?
  - T\_\_\_\_\_
  - N\_\_\_\_\_
  - M\_\_\_\_\_
  - Stage Group\_\_\_\_\_





# Larynx Case # 1

## Clinical Staging

- Clinical Stage correct answer
  - cT1a
  - cN0
  - cM0
  - Stage Group I
- Based on stage and other factors, treatment is selected
- Review treatment guidelines for this stage



# Larynx Case # 1

## Clinical Staging

- Rationale for staging choices
  - cT1a for tumor limited to one vocal cord (may involve anterior or posterior commissure) with normal mobility with no CT evidence of paraglottic space involvement
  - cN0 because nodes were clinically negative on physical exam and imaging
  - cM0 because there were no signs or symptoms to suggest distant metastases; if there were, appropriate tests would be performed before developing a treatment plan



# Larynx Case # 1

## Treatment Options

- Review treatment guidelines for this stage
- Discuss appropriate treatment plans for this patient



# Larynx Case # 1

## Presentation after Surgery

- The choice of treatment lies between
  - Definitive external beam radiotherapy
  - Endoscopic laser resection
  - Open partial laryngectomy (rarely used in this situation)
- The procedure chosen based on patient factors and the lesion confined to one vocal cord and clinically negative nodes, Stage I, is endoscopic laser resection
- Presentation at Cancer Conference for adjuvant treatment recommendations and pathological staging



# Larynx Case # 1

## Surgery & Findings

- Surgery
  - Endoscopic laser resection
- Operative findings
  - No additional information



# Larynx Case # 1

## Pathology Results

- Squamous cell carcinoma, involving lt vocal cord
- Tumor size - 1.2cm
- Grade - moderately differentiated
- Maximal thickness - 0.7cm
- Invades lamina propria
- Extension to anterior commissure
- Margins negative



# Larynx Case # 1

## Pathological Staging

- Pathological staging
  - Uses information from clinical staging, operative findings, and resected specimen pathology report
- Purpose
  - Additional precise data for estimating prognosis
  - Calculating end results (survival data)



# Larynx Case # 1

## Pathological Staging

- Synopsis: patient with 1.2cm laryngeal vocal cord lesion extending to the anterior commissure, regional nodes negative
- What is the pathological stage?
  - T\_\_\_\_\_
  - N\_\_\_\_\_
  - M\_\_\_\_\_
  - Stage Group\_\_\_\_\_





# Larynx Case # 1

## Pathological Staging

- Pathological Stage correct answer
  - pT1a
  - cN0 (cancer registry would assign pNX)
  - cM0
  - Stage Group I (cancer registry stage group 99)
- Based on pathological stage, there is more information to estimate prognosis and for selection of adjuvant treatment.



# Larynx Case # 1

## Pathological Staging

- Rationale for staging choices
  - pT1a for tumor limited to one vocal cord (may involve anterior or posterior commissure) with normal mobility
  - cN0 because regional nodes were clinically negative; physicians may mix clinical and pathological information when necessary (pNX for cancer registry documentation)
  - cM0 - use clinical M with pathological staging unless there is microscopic confirmation of distant metastases



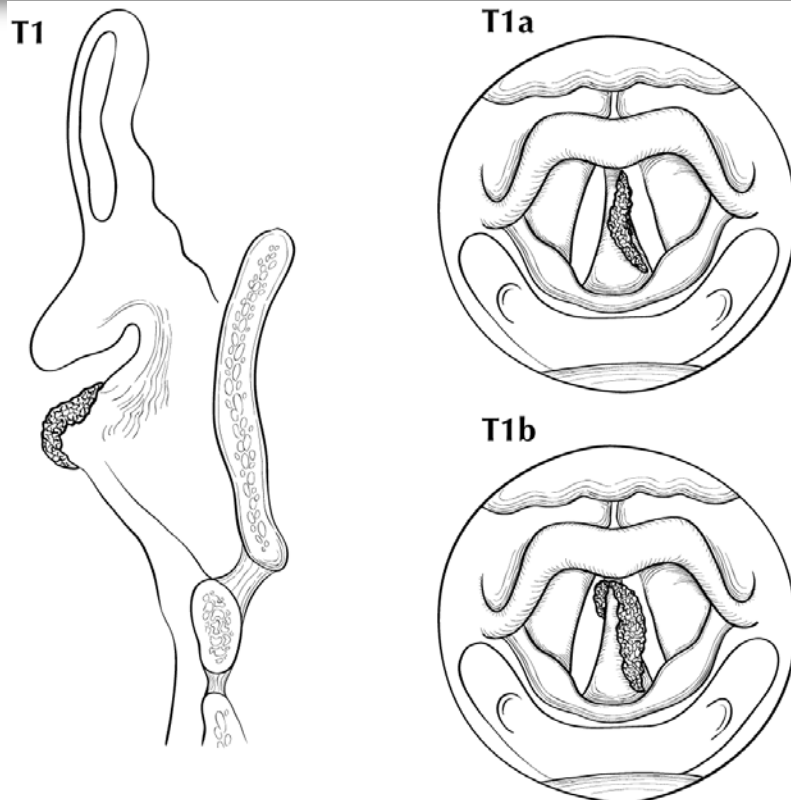
# Prognostic Factors/Registry Data Collection

- Applicable to this case
  - Extranodal extension (ENE): none
  - Human papillomavirus (HPV) status: neg

HPV is less prevalent in laryngeal cancer than oropharyngeal cancers



# T1 limited to vocal cord(s), normal mobility



T1a tumors are limited to one vocal cord (top right) and T1b tumors involve both vocal cords (bottom right)

Patel, Lydiatt, et al. Larynx. In Amin, M.B., Edge, S.B., Greene, F.L., et al. (Eds.) AJCC Cancer Staging Manual. 8th Ed., 2017



# Larynx Case # 1

## Recap of Staging

- Summary of correct answers
  - Clinical stage cT1a cN0 cM0 Stage Group I
  - Pathological stage pT1a cN0 cM0 Stage Group I
    - Registry pathological stage: pT1a pNX cM0 Stage group 99
- The staging classifications have a different purpose and therefore can be different. Do not go back and change the clinical staging based on pathological staging information.



# Staging Moments Summary

- Review site-specific information if needed
- Clinical Staging
  - Based on information before treatment
  - Used to select treatment options
- Pathological Staging
  - Based on clinical data PLUS operative findings and resected specimen pathology report
  - Used for selection of adjuvant treatment and prognosis
  - Used to evaluate end-results (survival)

