LARYNGEAL AMYLOIDOSIS

NAME OF AUTHOR: MEHNAAZ MASOUD, DR DEEPAK NAYAK M , DEPARTMENT: PATHOLOGY

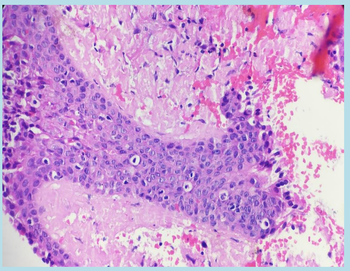
INTRODUCTION

- Amyloidosis is a heterogeneous group of inherited and inflammatory disorders involving extracellular deposition of beta-sheet fibrillar protein in different organs and tissues of the body.

- Based on etiology the types include 1) immunoglobulin light chain amyloidosis, 2) ATTR (amyloid transport protein transthyretin) amyloidosis and 3) reactive amyloidosis

- Laryngeal amyloidosis is usually a localized primary disease without systemic involvement most of the time. Localized amyloidosis in the head and neck region are rare and benign. Larynx is one of the most common sites in the head and neck when it comes to benign localized amyloidosis.

CASE REPORT



Laryngeal biopsy, H & E 40X

A 36-year-old female reported with complaints of noisy breathing with change of voice in the last 3 months. She was asymptomatic before the onset of these symptoms & stated that these symptoms were insidious in onset, present continuously. Investigative procedure reports showed a bilateral subglottic irregular mass present, just beyond the under surface of bilateral vocal cords. Additional abdominal fat biopsy along with frozen section of larynx done. Final HPE reports came positive for laryngeal amyloidosis.

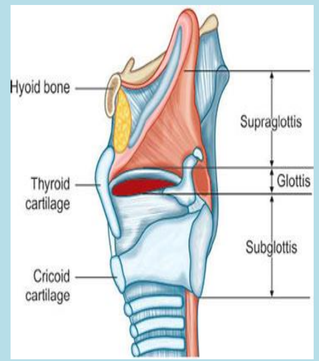
MANAGEMENT

Patient was taken up for micro-laryngoscopy + CO2 laser assisted excision of laryngeal amyloidosis mass from left sub-epiglottic mass. The post-operative period was uneventful and the patient gradually improved, stable on discharge. Month later came for further sitting. Internal laryngoscopy was done, which showed right sub-epiglottic granulation tissue along with left sub-epiglottic mass. Again, underwent micro-laryngoscopy with CO2 laser excision.

DISCUSSION

Larynx is one of the most common sites for amyloid deposits in the head and neck region. Within larynx, the most affected sites are vocal cords (true and false), sub-epiglottic region and the ventricles.

Patients present with complaints of hoarseness of voice, progressive dysphonia and may also have stridor, dry cough and hemoptysis depending on the severity.



These symptoms are often non-specific, as it can be synonymous with any infection or inflammation involving the larynx in general.

The Laryngoscopy findings usually present with yellow, white irregular nodules or polyploid lesion. As there are chances of it being mistaken for other benign or malignant laryngeal lesion, histopathology is important hereby, histopathological studies and imaging are crucial when it comes to diagnosing the case.

Abdominal fat biopsy, a newer method, less invasive with minimal complications, is done to rule out systemic involvement. Frozen section done to rule malignancy.

CONCLUSION

Amyloidosis is relatively rare and effective treatment cannot be started unless the type of amyloid as well as site is identified. Isolated amyloidosis is quite common in larynx among other sites in the head and neck. Generalized findings in internal laryngoscopy in patients with laryngeal amyloidosis report with amyloid deposits commonly located in glottic, epiglottis, trachea along with bulging vocal cords . Symptoms in the case of laryngeal amyloidosis or amyloidosis in general can be non-specific & diagnosis is determined by the site as well as severity of amyloidosis. The most effective and known treatment is the micro-direct laryngoscopy with carbon dioxide laser excision treatment.

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