



CASE REPORT: PRIMARY BILATERAL VOCAL CORD HISTOPLASMOSIS PRESENTING WITH STRIDOR

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ABSTRACT

Histoplasmosis is a disease of immunocompromised and has a low incidence. Primary Laryngeal Histoplasmosis is a rare condition. Less than 100 cases of laryngeal histoplasmosis have been described in the medical literature. Isolated laryngeal involvement leads to the misdiagnosis and mistreatment of tuberculosis or laryngeal cancer. The development of hoarseness in a patient with histoplasmosis or a laryngeal mass leading to hoarseness should be seen with suspicion. The diagnosis becomes more difficult when it presents as a primary disease. Biopsy is prerequisite for diagnosis.

KEYWORDS

Histoplasmosis, granulomatous inflammation, vocal cord, stridor

INTRODUCTION

Laryngeal histoplasmosis usually occurs in immunocompromised patients through the dissemination of the fungus from the lungs to other organs. Histoplasmosis of isolated laryngeal (primary) involvement is rare. The condition is usually seen in children less than seven years of age who have undergone renal transplant and under immunosuppressive therapy or in elderly who are immunocompromised. The clinical picture resembles tuberculosis and Carcinoma Larynx. Diagnosis and treatment may get delayed.

Case Report

60-year male patient presented in ENT Emergency at PGIMS Rohtak with stridor, hoarseness of voice for last 2 months and breathing difficulty for last 3 days. Emergency Tracheotomy was done, routine investigations were sent, and patient was admitted. He was a known diabetic for last 10 years on anti-diabetic treatment. Patient had undergone 3 biopsies before. One of the reports showed atypia with granuloma formation where malignancy could not be confirmed. Other report was granuloma formation with suspicion of tuberculosis which could not be confirmed on ZN staining. Another report showed non-malignant non-tubercular granuloma. The slides and blocks that were already with the patient were reevaluated for histopathology to rule out histoplasmosis at our Pathology Department. Meanwhile CECT Neck and fiberoptic laryngoscopy were done which were further in favor of Laryngeal Histoplasmosis.



Fig 1.1: Granulomatous inflammation of both ary-epiglottic folds causing narrowing of Larynx on fiberoptic laryngoscopy. Laryngoscope could not be negotiated further, and vocal cords could not be visualized because of granuloma

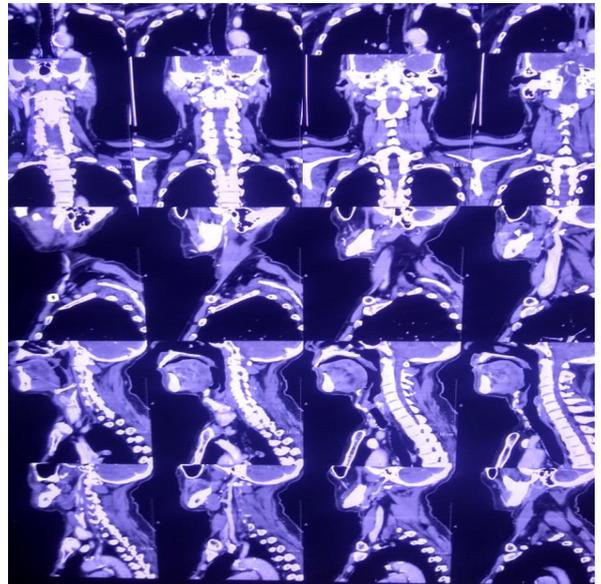


Fig 1.2: CECT Neck showing obstruction at the level of vocal cords because of granuloma formation. Vocal cord biopsy confirmed the diagnosis of Histoplasmosis

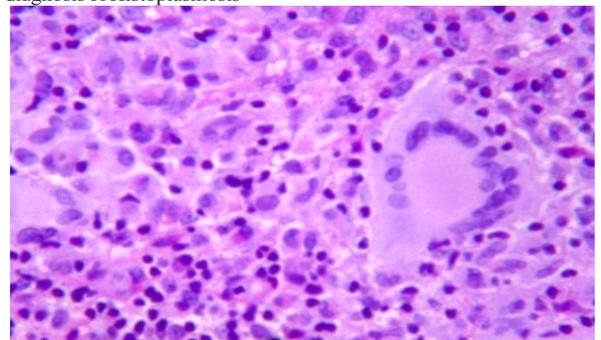


Fig 1.3: Vocal cord biopsy, HE staining showed stratified squamous epithelium with abundant mixed inflammatory infiltrate, histiocytes, plasma cells, polymorphonuclear cells, and multinucleated giant cells without necrosis or vasculitis, mixed infiltrate and multinucleated

giant cells suggestive of Histoplasmosis.

The patient was started on IV Amphotericin B 0.7 mg/Kg/day for first five days which offered significant relief in symptoms and was discharged on Tablet Itraconazole 200 mg twice daily.

DISCUSSION

Histoplasmosis is caused by fungus *Histoplasma capsulatum*. Human infection usually inhaled by mycelia, it's the natural infectious form, present in birds' feces, which is captured by macrophages, inside they germinate giving blastospores. In cases of deficient cellular immunity, are released from the phagolysosome passing the cytoplasm, where they multiply freely, and the infection will spread to other body systems. Infection stimulates the proliferation of infected macrophages and lead to granuloma formation. The clinical picture and histopathology closely mimic paracoccidiomycosis, tuberculosis, leishmaniasis, blastomycosis, leprosy, syphilis, actinomycosis, carcinoma and often leads to misdiagnosis.

CONCLUSION

A patient who presents with hoarseness of voice and breathing difficulty with no definitive diagnosis on biopsy may be misdiagnosed for other conditions like tuberculosis and malignancy. Histoplasmosis should be suspected as one of differential diagnosis. Early diagnosis and treatment avoid unnecessary aggressive interventions.

REFERENCES

1. Robayo CA, Ortiz CP. Histoplasmosis laryngeal: report first case in Colombia. *Colombia Médica*: CM. 2014 Oct;45(4):186.
2. Pochini Sobrinho F, Della Negra M, Queiroz W, Ribeiro UJ, Bittencourt S, Klautau GB. Histoplasmosis of the larynx. *Revista Brasileira de Otorrinolaringologia*. 2007 Dec;73(6):857-61.
3. Subramaniam S, Abdullah AH, Hairuzah I. Histoplasmosis of the Larynx. *Medical Journal of Malaysia*. 2005 Aug;60(3):386.
4. Sataloff RT, Wilborn A, Prestipino A, Hawkshaw M, Heuer RJ, Cohn J. Histoplasmosis of the larynx. *American journal of otolaryngology*. 1993 May 1;14(3):199-205.
5. Donegan JO, Wood MD. Histoplasmosis of the larynx. *The Laryngoscope*. 1984 Feb;94(2):206-9.
6. Kheir SM, Flint A, Moss JA. Primary aspergillosis of the larynx simulating carcinoma. *Human pathology*. 1983 Feb 1;14(2):184-6.