# Clinical Records

## Aspergillosis of Larynx

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Cases of infection by the aspergillus of the maxillary antrum or ear are frequently seen but cases of laryngeal involvement are very rare. The present case seems worthy of record, however, because of the unusual location of the lesion involving the vocal cord only, without any other presenting lesions. The vocal cords are involved only in advanced stages of broncho-pulmonary aspergillosis.

### Case report

A male, aged 48 years, farmer by profession, complaining of hoarseness of voice of $1\frac{1}{2}$ months, came to E.N.T. clinic of this hospital on 27 September 1967. Otolaryngological examination disclosed the presence of an ulcer with white mass on the middle of the upper surface of right vocal cord (Fig. 1).

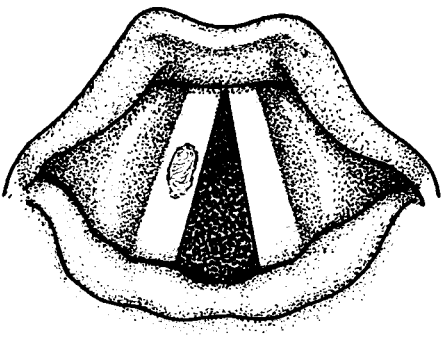


Fig. 1.

Mobility of the cord was normal. A general examination, including the X-rays of lungs and blood tests showed essentially normal. A biopsy of the affected cord was performed on 18 October 1967 and the specimen was sent for histopathological examination. The histopathological examination of the material, revealed colonies of aspergillosis associated with hyperplasia of surface epithelium and necrosis in places (Fig. 2). No further treatment was given. On subsequent examination, at an interval of 2 months, the patient appeared quite normal and there is every reason to consider his lesion completely treated.

### Discussion

Aspergillosis is an inflammatory disease caused by an infection with one of the species of fungi of the genus aspergillus and of the family Aspergillacea. Micheli, in 1729, described aspergillus and named it, because of its resemblance



https://doi.org/10.1017/S0022215100070444 Published online by Cambridge University Press

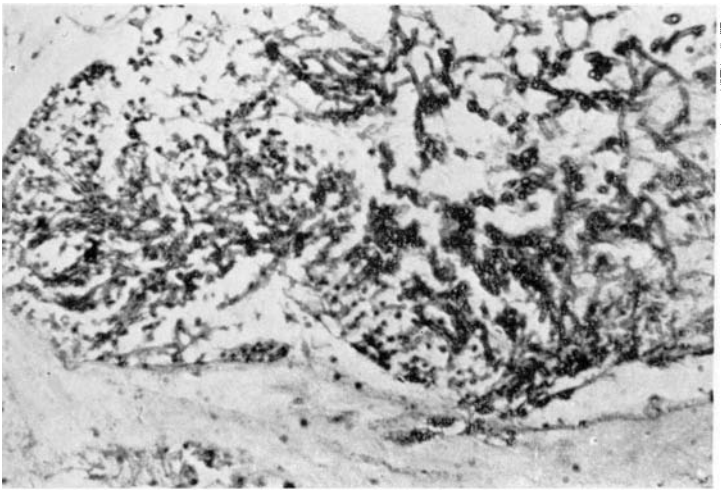


FIG. 2.

to "rough head". Since then many mycologists have identified nearly 400 species of the family (Thom *et al.*, 1926). Species of the genus aspergillus are very common in our general environment. They are often found on dead or dying plant tissue. The spores of this fungus are common in soil and upon vegetation of various sorts. These are common and annoying laboratory contaminants. In one way or other, human beings must come in contact with it with great frequency.

Among these, *A. fumigatus*, *A. niger* and *A. flavus* are the common pathogenic fungi. These are recognized as pathogenic to birds and mammals for many years. Unfortunately, there are many instances in which these fungi were reported as human pathogens. They are frequent invaders of external auditory canals, nasal sinuses, and in certain types of pulmonary suppurations. Infection of external auditory canal is very common in India, probably due to high humidity and light, which are abundant and necessary for growth and reproduction of these fungi. Infections of maxillary sinuses, by these fungi, are not common in India, though they are frequently reported in other countries (Nash, 1938; Rentschler *et al.*, 1939; Weller *et al.* 1960).

The study of clinical histories of many cases of broncho-pulmonary aspergillosis revealed certain well established conditions which predispose to this infection. Chief among these conditions are: chemo- and antibiotic therapy, debilitating diseases, adrenal corticosteroid administration, radiation therapy and the use of antineo-plastic drugs.

The reaction of the tissues to the infection by these fungi may be either of the following: diffuse necrosis, a granuloma or a pseudomembrane formation. The former two conditions are frequently seen in the lung. Necrosis is secondary to toxic products of the organism or by an infarction. Granuloma, also known as aspergilloma, is often found as a complication of a pre-existing chronic cavitary lesion, caused by some other infectious agent. This granuloma is nothing but a tangled mycelial mass, lying either free in the cavity or attached



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to the wall by the fibrinous exudate. The pseudo-membrane formation is usually seen in the ear and sometimes in tracheobronchial tree. In the case reported, it was seen in the larynx. This membrane looks like a "wet blotting paper", and is composed of amorphous and necrotic debris, in which a compact mass of mycelium grows.

Since the introduction of antifungal drugs, like nystatin and amphotericin B, the gloomy outlook of this condition is changed to better. Nystatin is used as local insufflation and amphotericine B is used systemically.

**Summary**

A report of a case of Aspergillosis of the larynx is presented. A brief survey of the fungus, together with predisposing conditions, tissue reactions to its infection and also a word regarding its treatment are presented. The chief interest of this case lies in the localization of the lesion on the vocal cord only.

**Acknowledgment**

My thanks are due to Dr. D. J. Reddy, Principal, Jawaharlal Institute of Post-graduate Medical Education and Research, Pondicherry for allowing me to publish this case.

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