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Tuberculosis is a chronic bacterial infection caused by Mycobacterium tuberculosis which by its cell-mediated immunity forms characteristic granuloma in the affected tissue. The incidence of tuberculosis in Europe was rising at the turn of the 21st century due to the increasing incidence of immune deficiency states (HIV, steroid treatment, drug and alcohol addictions) and deteriorated socio-economic status of some population groups.

Our aim was to remind of the chance of ORL presentation of tuberculosis.

We present a case of a 74-year-old patient with laryngeal tuberculosis. He had basal pleural effusion plus multiple co-morbidities and was referred to our department because of dysphonia and dysphagia for about a month. Throat and laryngeal examination revealed bilateral granulomatous growths on the posterior thirds of the true vocal cords. The patient’s spumum was negative for M. tuberculosis, but the ADA test from the pleural effusion turned out positive. A decision for active observation of the laryngeal finding was taken and the patient was treated with triple tuberculostatic drug therapy. Two months later on a follow-up the lesions responded very well to the treatment, and significantly decreased in size. The diagnosis laryngeal tuberculosis was therefore established ex juvantibus.

Discussion

According to WHO definitions, a case of pulmonary TB is diagnosed when the disease is involving only the lung parenchyma. The incidence of tuberculosis in Europe was rising at the turn of the 21st century due to the increasing incidence of immune deficiency states (HIV, steroid treatment, drug and alcohol addictions) and deteriorated socio-economic status of some population groups. Diagnosis should be based on one culture-positive specimen, or histological or strong clinical evidence consistent with active extrapolmonary disease, followed by a decision by a clinician to treat with a full course of anti-TB chemotherapy. A patient in whom both pulmonary and extrapolmonary TB has been diagnosed should be classified as a pulmonary case [1].

Among extrapolmonary tuberculosis, the most common manifestation is lymphadenitis [2]. ENT manifestations of tuberculosis are rare, and are usually secondary to pulmonary involvement. According to WHO definitions, a case of tuberculosis is classified as extrapolmonary when affects or organ other than the lungs (e.g. pleura, lymph nodes, abdomen, genitourinary tract, skin, joints and bones, meninges, etc.).

The presenting symptoms of middle ear tuberculosis are otorrhea which is persistent despite multiple courses of antibiotics, otalgia, hearing loss, and, in more advanced cases - facial palsy. Physical examination findings include abundant polypoid or avascular pale granulation tissue. The patients with exuberant pale middle ear and mastoid granulations should undergo a mastoid exploration or cortical mastoidectomy, and the specimens must be sent for histopathology examination, mycobacterial culture and susceptibility testing.

Nasal obstruction and blood-stained rhinorrhea are the most common symptoms of nasal and the paranasal tuberculosis.

Fine-needle aspiration is more reliable in patients with HIV infection because of the higher mycobacterial burden, and in these patients should be the initial diagnostic procedure [9].

The presenting symptoms of laryngeal tuberculosis are typically hoarseness, dysphagia, and dysphonia along with loss of weight and loss of appetite. Initial laryngoscopy/fiberoptic laryngoscopic examination commonly reveals diffuse erythema and granulomatous or polypoidal changes of the vocal cords. The classical clinical features of laryngeal tuberculosis are seldom seen in modern clinical practice, and biopsy is essential to establish the diagnosis and rule out a malignancy. Specimens are sent for histopathology examination, mycobacterial culture, and optionally for drug susceptibility testing. If there is a secure airway, the treatment of choice is conservative [14].

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Conclusion

Tuberculosis infection should always be considered in the differential diagnosis of cervical lymphadenopathy, laryngeal tumors, papillomatosis, chronic laryngitis, persistent otorrhea and nasal obstruction with bloody nasal discharge. This diagnosis is mainly based on a positive mycobacterial smear and culture or the histopathological presence of a chronic / caseating granuloma.

References

6. Stevens GL, Randle GM, Smith SG, Whitehead S. A six- to nine-month regimen (two months of isoniazid and rifampin) is recommended as the initial therapy for all forms of extrapolmonary tuberculosis unless the organisms are known or strongly suspected to be resistant to the first-line drugs [12].

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