Examination of 41 cases of laryngeal tuberculosis observed between 1975–1985


ABSTRACT: Forty one cases of laryngeal tuberculosis, accounting for 0.8% of all cases of tuberculosis observed in 1975–1985, are evaluated. The mean age was 53 yrs, the male/female ratio 9:1. In all cases current or earlier pulmonary tuberculosis was noted. The laryngeal sites affected were, in order of frequency: true vocal cords, epiglottis, false cords and laryngeal ventricles, arytenoid and interarytenoid area, subglottic area. The patients were usually treated with Isoniazid, rifampicin, ethambutol for 6–12 months. Two cases required excision of laryngeal lesions. The results of chemotherapy were good.

Patients and methods

We investigated the clinical cards of 5,216 cases of respiratory tuberculosis admitted to our hospital in the years 1975–1985; 3,082 in 1975–1980 and 2,134 in 1981–1985. We excluded cases in which the tuberculosis diagnosis was founded solely on clinical and radiological criteria. In 4,021 cases (2,183 in 1975–1980 and 1,838 in 1981–1985) there were repeated findings of tubercle bacilli on direct smear or culture examination and/or a histological finding of tuberculous granuloma.

Among the 4,021 cases, there were 41 cases (26 in 1975–1980 and 15 in 1981–1985) of histologically verified tuberculous laryngitis; in all cases, biopsy was performed on lesions evidenced during direct laryngoscopy that had been carried out for dysphonia, dysphagia or dyspnoea.

Before chemotherapy, a laryngeal location was one of the most serious and common complications of tuberculosis and was often fatal.

Currently the laryngitis is easily cured by chemotherapy and is, anyway, rarely encountered. In the past forty years we find a dramatic reduction in the incidence of laryngeal tuberculosis. In the immediate postwar period the percentage of specific laryngitis among patients with pulmonary tuberculosis was 35–40% [1] in Europe and North America, and it now stands at around 0.5% [2]. We review material during 1975–1985.

Results

The 41 patients included 37 males and 4 females (M/F ratio 9:1) ages 29–75 yrs (mean 52 yrs). Thirty six patients smoked more than ten cigarettes a day and 23 had a history of heavy drinking. None of the patients were exposed to occupational risks. All had current or earlier tuberculosis. Of the 41 patients suffering from specific laryngitis, 26 were bacteriologically positive at direct smear and in the culture, and nine in the culture alone.

The bacilli in the biopsy material proved positive in 37 cases, in 2 at both direct and culture examination and in 35 in the culture alone. The specific lesions were located in true vocal cords (17), epiglottis (15), false cords and laryngeal ventricles (11), arytenoid and interarytenoid area (6) and subglottic area (2). In 19 subjects the lesion involved several areas (in 8 the entire larynx). Two cases presented submandibular adenopathy that regressed during treatment.

The clinical picture included systemic symptoms in 17 patients and symptoms linked to the laryngeal lesion: dysphonia in 29 cases, dysphagia in 27, dyspnoea of various degrees (due to laryngeal stenosis) in 21, and coughing in 6.

Biopsy, performed during endoscopy in all cases, revealed the presence of granulomatous tissue with a giant cell histiocytic appearance together with areas of caseous necrosis. Chest X-rays showed tuberculous lesions in all cases.
Chemotherapy was given to all of the 41 patients, mainly with rifampicin, isoniazid and ethambutol. Two cases retired from our study 5–11 wks after diagnosis. The remaining 39 patients were subjected to chemotherapy for 6–12 months. The follow-up lasted from 8 months to 2 yrs after stopping chemotherapy. Indirect clinical and laryngoscopic controls were performed every two months and direct laryngoscopic controls every four months. In all of the 39 patients, endoscopic controls evidenced disappearance of the active lesions. In 37 patients this result was achieved by means of chemotherapy treatment alone. In the remaining 2, with lesions exclusively or predominantly in the epiglottis, surgery also proved necessary (amputation and covering of the cartilage). In 28 cases symptoms regressed completely, whilst in the remaining 11 cases moderate dysphonia (3), dysphonia + dysphagia (6) remained. No cases of recurrence were reported. In one case during follow-up, epidermoid carcinoma of the epiglottis was observed.

Conclusions

The purpose of our research was to document a fairly large series of a condition that has long been a rare observation in Europe. Within our material, the percentage of cases of tubercular laryngitis was moderately lower in 1981–1985 than in 1975–1980; 15 cases out of 2,136 (0.70%) and 26 cases out of 3,082 (0.84%), respectively.

In all cases laryngeal tuberculosis was accompanied by current or earlier pulmonary tuberculosis. This supports the view that, even if clinically isolated, laryngeal tuberculosis is a manifestation of secondary tuberculosis [3–5].

The percentage distribution of the lesions over the various parts of the larynx in our sample was also in line with reports in the literature [6–8].

As far as symptoms are concerned, our observation of a low frequency of coughing (6 cases) was in distinct contrast with the findings of others [9], who have reported an 80–90% occurrence of this symptom.

The generally favourable course of the laryngeal lesions shows that adequate chemotherapy provides effective treatment.

References