Aphonia;
A Silent Presentation of Active Pulmonary Tuberculosis

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Intro

- 10 million infections per year globally w/ common presenting symptoms of low grade fever, weight loss, night sweats, chills, cough, and dyspnea
- Dysphonia is a rare presenting symptom of Tb typically associated w/ laryngeal Tb (i.e. granulomatous disease affecting the vocal cords) but can be seen with compression anywhere along the course of the recurrent laryngeal nerve

Case

- 27 yo F w/ a PMH of chronic eAg negative hepatitis B, HLD, PCOS, and a history of latent Tb treated in the Philippines as a child presented with 3 weeks of dysphonia.
- No associated sore throat, odynophagia, cough, shortness of breath, sputum production, NS, chills, fever, weight loss
- 5 day course of prednisone for acute laryngitis, no improvement, sent to ENT
- Flexible fiber optic exam w/ asymmetric true vocal cord movement and severe left vocal cord immobility with glottis gap and atrophy, consistent with L vocal cord palsy. There were no concerning mucosal lesions or masses
- CT neck with contrast revealed calcified nodules in bilateral lung apices as well as multiple calcified mediastinal lymph nodes. CT Chest, Quant TB Gold assay, and sputum AFB cultures consistent w/ active pan-sensitive M. tuberculosis
- 6 months of anti-TB therapy without resolution of her dysphonia and underwent left injection laryngoplasty

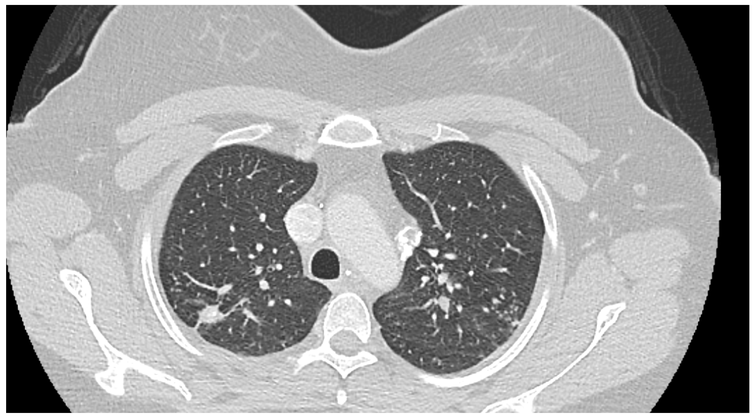

Figure 1. Prominent calcified mediastinal lymph node at the level of the aortic arch. Also seen in this image is a calcified pulmonary nodule in the RUL and scattered tree in bud opacities.

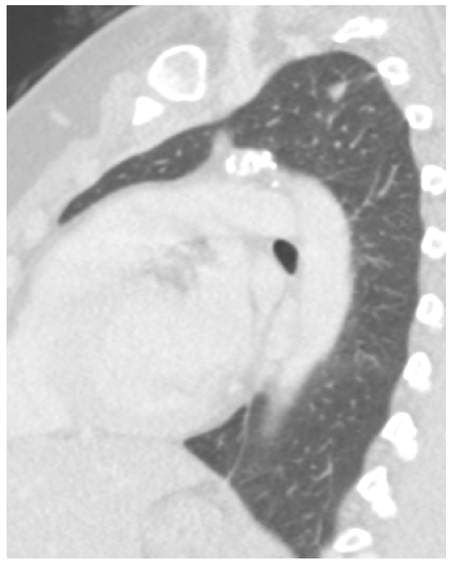

Figure 2. Sagittal cut, demonstrating the calcified mediastinal lymph node seen in figure 1. It is seen here just superior to the aortic arch in the vicinity of the likely course of the recurrent laryngeal nerve.

Discussion

- Recurrent laryngeal nerve paralysis is an extremely rare presentation of pulmonary tuberculosis with only 6 reported cases found in the literature.
- This is unique in that there was no associated symptoms such as night sweats, weight loss, fever, or cough.
- Presentation most likely due to local compression of the recurrent laryngeal nerve due to large mediastinal lymphadenopathy
- Of the 6 reported cases of recurrent laryngeal paralysis due to Tb, 3 had partial or complete recovery of voice quality following treatment of Tb. This case reinforces the importance of considering intrathoracic pathology as a source of dysphonia.

Sources

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