

Peer Review File

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Reviewer A

Comment 1: This content is one typical diagnosis process of TPO, and we think that there is no novelty. From another point of view, I think we should focus on this case.

Reply 1: Thank you for your feedback and concern regarding this case. I agree that aspects of this case align with typical clinical symptoms. However, this patient's response to an esophageal dilation addresses the lack of current treatment for this diagnosis. Aside from this novel disease process, this case significantly highlights the limitations of imaging, pulmonary function tests, and barium swallow tests at a level of detail that has not previously been explored. Based on this comment and the comments from reviewer 3, we have clarified the novel aspects of this case and added suggestions related to increased follow-up and study with bronchial lavage or biopsies in these patients.

Changes in the text: (Line 110-121) These patients may also benefit from bronchial lavage to studying the infections responsible for respiratory infection and bronchial biopsies to better understand disease etiology and risk for progression. Further analysis of tissue from these patients will help lead researcher in understanding the cause of future risk of TPO. In addition, increased follow-up and attention to these patients is necessary to reduce harm during future medical procedures and treatment for infections. A longer follow-up will also improve overall understanding of the disease process and possible need for more extreme treatments in the case of disease progression or in cases where malignancy may arise. In cases of large nodules and obstruction of the airway, laser therapy and mucosal resection have been considered as possible therapies (3,6). In this case, the patient reported improved symptoms from an atypical treatment related to another condition: esophageal dilation for GERD. Relief of TPO symptoms has not previously been attributed to this procedure, and this outcome suggest possible treatments for future cases. It also suggests that further investigation into the etiology, treatment, disease progression, and related diseases of TPO could be influential in relieving symptoms of dyspnea and recurrent infection. (Line 128-129) In severe cases, treatments, such as esophageal dilation may provide relief for patients.

Reviewer B

Comment 1: the case is interesting, logically organized and well written but several references are missing...quote PMID: 30655500, PMID: 26339438, PMID: 27803413

Reply 1: Thank you for taking the time to review this case. We appreciated the suggestion of the listed references. We have reviewed the articles and included the references stated in the comment.

Changes in the text: (Line 53-58) The etiology of this disease is unknown and there are limit treatment options for patients. Biopsies demonstrating ossification of the nodules suggestion possible relationships to irritation (5). However, cases have been identified in both younger and older individuals with and without history of tobacco use (6). TPO has been reported in coexistence with thyroid pathologies and malignancies (7,8). The variation in disease presentation, severity, and course supports thorough investigation of clinical cases involving TPO.

Reviewer C

Comment 1: Authors should be underline the importance of microbiology on bronchial lavage in these patients with recurrent infections of the respiratory ways.

Reply 1: Thank you for this suggestion. The authors agree that bronchial lavage could be beneficial in understanding the cause of recurrent respiratory infection in this patient group. We have added a statement mentioning the importance of this study in TPO.

Changes in the text: (Line 110-111) These patients may also benefit from bronchial lavage to studying the infections responsible for respiratory infection and bronchial biopsies to better understand disease etiology and risk for progression.

Comment 2: Today there are no studies evaluating the true cause of this rare disease. the answer can only come from molecular biology studies on biopsy samples.

Reply 2: The author agree that studying biopsy samples from can help physicians understand the cause and progression of this disease. Thank you for this suggestion. We have added a statement about the importance of tissue analysis in these patients.

Changes in the text: (Line 110-112) These patients may also benefit from bronchial lavage to studying the infections responsible for respiratory infection and bronchial biopsies to better understand disease etiology and risk for progression. Further analysis of tissue from these patients will help lead researcher in understanding the cause of future risk of TPO.