# Spontaneous resolution of pulmonary inflammatory pseudotumor

Sir,

We read with interest the case report by Swathi *et al*.[1] entitled "Pleural effusion masquerading as pseudotumor" wherein they state "Unlike the vanishing tumor of heart failure which resolves spontaneously, pulmonary inflammatory tumors need surgical excision". We would like to highlight the literature on the subject and submit that pulmonary inflammatory pseudotumor (IPT) may exhibit spontaneous resolution.

We reported[2] a 44-year-old male, who presented to us with cough and minimal expectoration for five months, along with chest pain, hemoptysis and fever for a fortnight. Imaging revealed an irregular mass in the right middle lobe and biopsy showed plasma cell granuloma. The patient

underwent surgery to remove the mass but resection had to be abandoned as the mass was adherent to the lower lobe, chest wall and mediastinum. However, a wedge biopsy confirmed the diagnosis of pulmonary IPT. Remarkably, the patient experienced marked symptomatic relief within three weeks, significant resolution on chest radiograph at four weeks, and complete resolution with residual scar on computed tomographic scan done at 1 year.[2]

While reviewing the literature for pulmonary IPT, we found five reports documenting a total of 6 patients with spontaneous resolution of pulmonary IPT, with ours being the seventh such patient. Pulmonary IPT presented as a mass in 5 patients. In another set of 5/7 patients, invasive diagnostic procedure was followed by complete spontaneous resolution of symptoms by four weeks to three months. We also found in the literature reports of two patients with pulmonary IPT, in whom spontaneous reduction in tumor size without complete resolution was documented.[3,4]

Complete spontaneous resolution has been reported for extra-pulmonary IPT also. In one patient, an IPT of liver resolved completely spontaneously, after diagnostic biopsy.[5] In another patient with a mass in the base of skull anteriorly, slow but complete spontaneous resolution was reported.[6] Complete resolution of pulmonary IPT has also been reported when corticosteroids were given for co-existent inflammatory tumorous lesions in other organs- intracranial cavernous sinus,[7] pituitary stalk and other sites,[8] and kidney and other organs.[9]

Overall, prevalence of IPT is estimated to be 0.7% in tumors of lung and bronchi.[10] It displays local aggression and hence it has been christened 'tumor' but it has an encouraging prognosis, hence it is also called 'pseudotumor'. Perhaps the best name that summarizes its characteristics is given by Umiker and Iverson[11] who called it 'post inflammatory pseudo tumor'. In conclusion, it appears that pulmonary IPT can undergo spontaneous resolution, especially after invasive diagnostic procedure.

***Ashok Shah, Uday Aditya Gupta***

*Department of Respiratory Medicine, Vallabhbhai Patel Chest Institute, University of Delhi, Delhi, India.*
*E-mail: ashokshah99@yahoo.com*

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