

Allergic Bronchopulmonary Aspergillosis With Hilar Adenopathy in a 42-Month-Old Boy

To the Editor,

Allergic bronchopulmonary aspergillosis (ABPA) is reported to occur in 7.6% of Indian adults with asthma¹ but, is rarely reported in children without cystic fibrosis, especially in those less than 10 years of age. The rarity of such a report prompted this description of a 42-month-old boy with ABPA and hilar lymphadenopathy.

The child, referred for evaluation of radiological infiltrates, had wheezing dyspnoea and cough for the past 1 year. His mother, maternal grandmother and paternal grandfather were all asthmatics. Six months prior to referral, he had received, for the radiological infiltrates, antituberculous therapy without relief. A review of serial chest roentgenograms over the past 1 year revealed transient pulmonary infiltrates. CT of the thorax, done on presentation, showed pretracheal and right hilar lymphadenopathy (Fig. 1a) with central bronchiectasis in right lower and left upper lobes (Fig. 1b). Mucoid impaction was also seen in the right upper lobe. On auscultation, polyphonic rhonchi and coarse crepitations were audible. The total blood count was 9,700/mm³ with 10% eosinophils with an absolute count of 900/mm³.

10 mg daily (0.5 mg/kg) which was reduced to alternate day after 2 weeks and tapered. There was significant radiological clearing after 1 month.

The diagnosis of ABPA in children less than 5 years of age is rarely thought of, especially, in the absence of cystic fibrosis. ABPA was reported in infants as young as 6 months.² Although ABPA is well known to complicate children with cystic fibrosis, our patient had no clinical evidence to suggest this entity which is a rarity in our country. Early diagnosis is vital to prevent irreversible fibrotic changes. We have reported an 11-year-old boy with ABPA who had cavitation and clubbing.³ The first roentgenologic lesion in our patient was detected at two and a half years of age. Within 1 year we demonstrated extensive central bronchiectasis. CT—thorax helps to safely and rapidly demonstrate central bronchiectasis which remains a *sine qua non* for the diagnosis of ABPA.^{4,5} In addition, CT helped us to demonstrate hilar lymphadenopathy, which has been documented in ABPA. However, this feature is yet to receive recognition and is reported to regress with steroid therapy.⁶ Suspicion of ABPA in such a clinical setting even with the presence of lymphadenopathy can avoid invasive procedures. To our knowledge, this is the first report of hilar lymphadenopathy in ABPA in the pediatric age group.

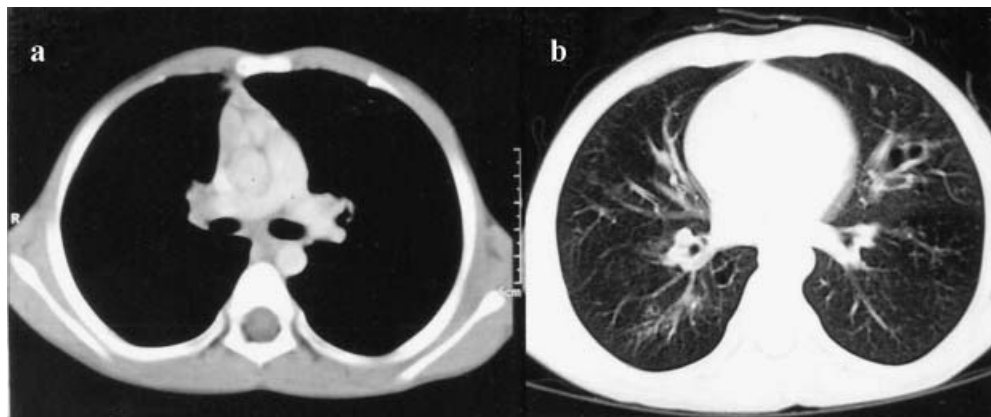


Fig. 1. (a) Contrast enhanced computed tomography of thorax (mediastinal window) showing right hilar lymphadenopathy. (b) Contrast enhanced computed tomography thorax (lung window) showing central bronchiectasis in the left upper lobe.

The child could not perform spirometry. Intradermal challenge with extracts of *Aspergillus fumigatus* and *flavus* gave strong type I and type III reactions. Gel diffusion studies showed strong bands of serum precipitans against *A. fumigatus*. The total IgE was raised to 1,651 IU/ml. The specific IgE and IgG against *A. fumigatus* were positive. A diagnosis of ABPA with mediastinal lymphadenopathy was made. The patient had a remarkable symptomatic response to oral prednisolone

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